

2014

# The Relationship of Community Factors and Self-Efficacy with Adjustment and Well-being of First-Generation College Students

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The Relationship of Community Factors and Self-Efficacy with Adjustment and Well-being  
of First-Generation College Students

by

Shalena Heard

Presented to the Graduate and Research Committee of Lehigh University

In Candidacy for the Degree of Doctor of Philosophy

in

Counseling Psychology

Lehigh University

11/25/2013

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2013

Approved and recommended for acceptance as a dissertation in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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## ACKNOWLEDGEMENTS

My experience as a first-generation college student, who matriculated through the Philadelphia Public school system inspired me to pursue research that will benefit students with similar backgrounds. I want to thank my community, composed of many persons and entities, in the Frankford section of Philadelphia. My community has shown me the power of resilience and the true meaning of unconditional love and support. I also want to thank my family for their continuous love, encouragement, and inspiration. My younger brother, “J”, has inspired me to make a difference in the lives of adolescents through my clinical work and research, and he is certainly my biggest cheerleader. I am also grateful for my partner Anthony, who comforts me during my darkest hours and constantly reminds me that I can achieve anything. My Lehigh University family, which includes a host of student affairs staff, deans, provosts, faculty, staff and students from across campus, has consistently reassured me that I am valued and loved. Within my Lehigh family, I was blessed with an amazing advisor and chair of my dissertation committee, Dr. Cirleen DeBlaere. Words cannot express my appreciation for the ways in which she has mentored me personally and professionally. My bond with Cirleen will last a lifetime and I am eternally grateful for the many lessons, laughs, and experiences we have shared throughout my journey. I am thankful for my devoted dissertation committee: Dr. M.J. Bishop, Dr. Arnold Spokane, and Dr. Jame’l Hodges, who contributed their unique perspectives to my project in the most supportive way possible, I could not have asked for a better group of mentors. Last, but certainly not least, I am thankful for my participants who shared their unique experiences with an open mind and heart. I hope this research will continue to show the world that first-generation college students are resilient, successful, and inspiring!

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## Abstract

As of 2010, the National Center for Education Statistics (NCES) reported that first-generation college students (FGCS) composed almost 50% of the population within higher education (U.S. Department of Education, 2010). Consequently, this unique subgroup of college students are the focus of many post-secondary education studies to determine factors that contribute to their success (Mehta, Newbold, & O'Rourke, 2011; Owens, Lacey, Rawls, & Holbert-Quince, 2010; Pascarella, Wolniak, Pierson, & Terenzini, 2003; Prospero & Vohra-Gupta, 2007). Literature on FGCS calls for an examination of ecological (e.g., community factors) and individual factors relating to college adjustment and well-being as well as the role of general self-efficacy in these links (Dennis, Phinney, & Chuateco, 2005; Plybon, Edwards, Butler, Belgrave, & Allison, 2003). Sampling ethnic and racial minority FGCS and White FGCS at various U.S. American institutions, the present study examined the direct and indirect relations between community factors and college student adjustment and personal well-being (i.e., life satisfaction), through general self-efficacy. Findings suggest that the relations between community factors, self-efficacy, college adjustment, and life satisfaction differ for ethnic and racial minority FGCS and White FGCS. Implications are provided for the design of more effective counseling interventions and higher education programming for ethnically and racially diverse FGCS.

The Relationship of Community Factors and Self-Efficacy with Adjustment and Well-being  
of First-Generation College Students

Chapter 1

INTRODUCTION

**First-Generation College Students (FGCS)**

College administrators, professors, and campus support services continuously face the challenge of meeting the needs of a diverse student body (Mehta et al., 2011). One subgroup of this population is *first-generation college students* (FGCS), defined as students who come from a family in which neither of the parents or guardians graduated from college (Mehta et al., 2011). As of 2010, the National Center for Education Statistics (NCES) reported that FGCS composed almost 50% of the population within higher education (U.S. Department of Education, 2010). FGCS may enter college with various disadvantages related to academic preparedness (Hertel, 2002; Mehta et al., 2011), readiness, exposure, financial need (Ramsey & Peale, 2010; Ting, 2003), beliefs in their ability to succeed in college, and/or community background (Hertel, 2002; Madyun, 2011; Mehta et al., 2011; Próspero & Vohra-Gupta, 2007; Stewart, Stewart, & Simons, 2007). The current study aims to extend prior literature on the experiences of FGCS by answering a call by scholars to investigate the simultaneous influence of personal characteristics and environmental support (e.g., Dennis et al., 2005). In particular, this study will examine how one's community background and general self-efficacy, together, are related to FGCS' adjustment and well-being. Community and university based FGCS programs are continuously developing and expanding to support this growing population. One particular federally-funded program is Student Support Services (SSS), which exists in a number of colleges and universities across the United States.

SSS is one of eight U.S. Department of Education grant programs administered under the federal TRIO Programs and has a particular focus on FGCS from low-income households during their first year of college (Chaney, 2010). In an attempt to increase the retention and success of FGCS from low-income households, SSS at various institutions design services to meet the specific needs of their student population which may include academic advising, tutoring labs, workshops, and special courses (Chaney, 2010). A national evaluation of SSS examined student outcomes over a six-year period and findings showed that students' participation in SSS accounted for significant positive variance in retention rates and degree completion (Chaney, 2010). The current study aims to support the value of SSS and other FGCS programs as well as provide recommendations to enhance the effectiveness of such programs.

Given the challenges faced by FGCS in higher education (e.g., Mehta et al., 2011), the significance of conducting research with FGCS reaches beyond a micro-level focus on how to support individual FGCS to include a macro-level social justice agenda of institutional transformation (Próspero & Vohra-Gupta, 2007). Institutions can utilize FGCS research to inform a systemic restructuring of college environments that promote the integration of ethnically and racially diverse FGCS into higher education (Próspero & Vohra-Gupta, 2007). Modifications at the institutional level may range from university-wide programming that provides social support and resources to FGCS to faculty training seminars that promote varied teaching methods (Próspero & Vohra-Gupta, 2007). Additionally, college counseling center personnel may increase their effectiveness by mastering cultural competencies that incorporate the intersecting identity needs of FGCS (Gloria & Rodriguez, 2000; Owens et al., 2010; Walpole, 2007). Owens et al. (2010) provided a list of career counseling implications for counselors working with first-generation African American male college students that included

some cultural considerations that may be applicable to FGCS more generally. For example, the authors suggested that counselors recognize the environmental barriers related to FGCS success, and in turn demonstrate a willingness to assist and effectively work with clients to cope with such barriers (Owens et al., 2010). This career counseling recommendation was specifically aimed toward African American males, but may apply to FGCS of other ethnic and racial groups as well. Such findings highlight the need to examine recommendations and practices intended to promote the well-being of both ethnic and racial minority FGCS and White FGCS. Ethnic and racial diversity is just one cultural factor related to the FGCS experience. Importantly, it has been identified as a factor embedded in one's community background (Shaw & McKay, 1942).

### **Community Organization and Social Disorganization Theory**

**Social disorganization theory.** FGCS are socialized by a number of formal and informal institutions that may or may not prepare them for the college experience (Ishiyama, 2007; Madyun, 2011; Sampson & Groves, 1989). A formal institution that inevitably influences one's perception of the world is the community or neighborhood in which one lives. This small microcosm of society may be organized in a way that promotes or hinders positive youth development (Kingston, Huizinga, & Elliot, 2009). Communities structured in ways that support healthy adjustment and well-being have been identified as high in social capital, referred to as the "quality and quantity of social interactions and social institutions" (McKenzie, Whitley, & Weich, 2002, p. 280) in a given community. The concept of social disorganization has been associated with lower social capital (Madyun, 2011; Veysey & Messner, 1999).

Dating back to 1925, *social disorganization* was defined as variations in community crime and delinquency rates resulting from community SES level, residential mobility rates (i.e., residents changing in the community; Sampson & Grove, 1989), and ethnic and racial

heterogeneity of the community (i.e., percentage of ethnically and racially diverse residents; Sampson & Groves, 1989). In more recent literature, the term social disorganization refers to a community's inability to identify common goals and solve chronic problems (Kubrin & Weitzer, 2003) and an additional contributing factor has been added, prevalence of single-parent households (Sampson & Groves, 1989). Social disorganization theory states that decreases in levels of community organization hinder the development of pro-social networks such as community-based programs and collective advocacy (Kingston et al., 2009; Kubrin & Weitzer, 2003; Sampson & Groves, 1989). Communities that are disorganized ultimately minimize residents' access to educational, recreational, and health resources essential to healthy youth development (Kingston et al., 2009). Although social disorganization theory has typically been used to explain crime rates and delinquent behaviors, scholars have suggested that studies investigating its link to academic outcomes and well-being are needed as well (Aneshensel & Sucoff, 1996; Madyun, 2011; McKenzie et al., 2002).

**Community organization's relationship with academic adjustment.** Identifying community factors that contribute to college student outcomes such as adjustment can be helpful to administrators, counselors, and communities who play an integral role in adolescent development. Madyun (2011) reviewed a group of studies that investigated the relationship between social disorganization and the achievement gap for African American students. Madyun stated that lower community SES, increased residential mobility, high prevalence of single-parent households, and increased ethnic and racial heterogeneity --- all factors composing social disorganization --- each have been linked to hindering positive socialization within a community. In turn, this negative community socialization leads to dramatic increases in school dropout rates, lower academic grades, and minimal resources and networks within African

American communities (Madyun, 2011). Therefore, Madyun (2011) urged more researchers to examine community factors when conducting studies on achievement outcomes with disadvantaged groups (e.g., FGCS) because to not do so would present incomplete and biased findings that overemphasize individual factors and underreport community ones.

To this author's knowledge, no one study has examined all four social disorganization variables as indicators of academic adjustment. However, the links between individual community factors and adjustment have been investigated. For example, a study of the relationship between social class (e.g., self-reported social class grouping, parent's educational level, concerns about financial security) and college adjustment was conducted with a sample of 324 predominately White liberal arts college students (Ostrove & Long, 2007). Findings indicated that students' social class was significantly correlated with both academic and social adjustment in college, such that students who reported lower social class status also reported feeling less adjusted to college in both domains (i.e., academic and social; Ostrove & Long, 2007). Thus, SES, a variable in social disorganization theory (Shaw & McKay, 1942), appears to influence a number of important college outcomes (Hughes, Stenhjem, & Newkirk, 2007; Mistry & Wadsworth, 2011; Ostrove & Long, 2007). Other social disorganization variables, such as residential mobility (Farrell, Aubry, & Coulombe, 2004; Scanlon & Devine, 2001), prevalence of single-parent households (DeLeire & Kalil, 2002; Thompson, Entwisle, Alexander, & Sundius, 1992), and ethnic and racial heterogeneity (Chavous, 2002; Owens, 2010), have also been negatively linked to academic adjustment with ethnically and racially diverse samples. Given these established relations between individual community factors and academic adjustment, a theoretical rationale for examining these particular factors is evident.

A next step in developing the literature on the relation between social disorganization and college adjustment would be to utilize a more comprehensive measure of community organization inclusive of SES, residential mobility, single-parent household prevalence, and ethnic and racial heterogeneity to investigate the link between the collective relationship of these factors and college adjustment. The current study will examine adjustment as one mental health outcome that provides a specific description of how college students perceive their transition from their home environment to campus. In addition, to provide a more complex assessment of mental health, the relationship between community factors and personal well-being will also be investigated.

**Community organization's relationship with personal well-being.** Accumulating research is finding a relationship between community factors, individually and in tandem, and well-being. Indeed, Duncan, Brooks-Gunn, & Klebanov (1994) found that one's mental health is shaped by the quality of their community (i.e., social ties). For instance, Bradley and Corwyn (2004) found that household SES, residential mobility, and single-parent household status were each related to well-being (i.e., life satisfaction) with their sample of ethnic and racial minority adolescents. Results confirmed that adolescents reported less well-being when their family SES was lower, residential mobility was higher, and they resided in a single-parent household (Bradley & Corwyn, 2004). These patterns of results have been replicated with samples of Chinese college students (Tong & Song, 2004) and ethnically and racially diverse U.S. and international adult samples (e.g., SES; Dittman & Goebel, 201; Farrell et al., 2004; Louis & Zhao, 2002). Similarly, level of ethnic and racial heterogeneity was found to be negatively related to life satisfaction with a subsample of White college students (Seder & Oishi, 2009) and a sample of ethnically and racially diverse adolescents (Sam, 1998). Importantly, some

investigations of the link between community factors and well-being have found that its relationship with a community factor (e.g., residential mobility) can be greater when it co-occurs with another factor (e.g., single-parent household; Scanlon & Devine, 2001). Such findings further reinforce the potential importance of examining community factors collectively in future studies.

It is noteworthy that investigations of well-being have defined this construct in myriad ways (e.g., presence of psychological symptoms, problem behaviors, cognitive functioning; Farrell et al., 2004; Luo & Waite, 2005), often from a deficit perspective. In an effort to promote counseling psychology's focus on positive life outcomes (Lopez et al., 2006) the current investigation will utilize life satisfaction as an indicator of personal well-being. Thus, attending to multiple calls in the literature to examine the relations between community characteristics and mental health outcomes with FGCS (Farrell et al., 2004; McKenzie et al., 2002), utilizing a more strength-based approach (Lopez et al., 2006), the current study will examine the links between community factors identified as important by social disorganization theory and life satisfaction. In addition, in an effort to investigate a more complex model of mental health (Frazier, Tix, & Barron, 2004), the current investigation will also examine the potential intervening role of self-efficacy in the links of community organization to college adjustment and well-being.

### **Potential Mediating Role of Self-Efficacy**

In an attempt to foster personal agency, individuals often utilize the psychological construct of self-efficacy. *Self-efficacy*, defined as one's self-expectations and beliefs regarding their ability to succeed, influences how people feel, think, motivate themselves and behave (Bandura, 1993). Plybon et al. (2003) identified self-efficacy as an important variable to investigate as a mediator of the relationships of community factors to college adjustment and

well-being. In support of this conceptualization, self-efficacy has been found to be related to community factors such as low SES (Gecas, 1989; Lipincott & German, 2007; Majer, 2009; Pintrich & Schunk, 1996; Tong & Song, 2004) and ethnic and racial heterogeneity (Steele, 1997); each have been found to predict lower self-efficacy with samples of African American (Majer, 2009), Chinese (Tong & Song, 2004), Latina/o American (Majer, 2009), and White (Gecas, 1989; Majer, 2009) college students. Residential mobility's link to personal self-efficacy has yet to be examined. In addition, although a relationship between single-parent household status and self-efficacy has not been substantially supported in the literature, scholars have hypothesized that this relationship exists (Gecas, 1989; McMillan & Reed, 1994; Peng, Lee, Wang & Walberg, 1992). In turn, scholars postulate that lower self-efficacy has a deleterious effect on college adjustment and well-being factors (i.e., life-satisfaction; Bandura, 1995; Diener, Emmons, Larsen & Griffin, 1985).

Certainly, several studies have found a positive correlation between self-efficacy and college adjustment with samples of African American (e.g., Ramos-Sanchez & Nichols, 2007; Vuong, Brown-Welty, & Tracz, 2010), Asian/Asian American (e.g., Chemers, Hu, & Garcia, 2001; Tong & Song, 2004), Latina/o American (e.g., Chemers et al., 2001; Phinney & Haas, 2003) and White (Chemers et al., 2001) students. An analogous pattern of findings have been obtained in the link of self-efficacy with well-being, with higher levels of self-efficacy being related to higher levels of life satisfaction with samples of African American (e.g., Bradley & Corwyn, 2004; Lent et al., 2005), Asian/Asian American (e.g., Coffman & Gilligan, 2003; Tong & Song, 2004), Latina/o American (e.g., Bradley & Corwyn, 2004; Lent et al., 2005), and White (Coffman & Gilligan, 2003) students.

Taken together, prior studies suggest that self-efficacy could be an important mediator in the link of community factors to college adjustment and well-being. In addition, previous scholars have discussed the need to examine cultural differences in these links (e.g., Cicognani, 2011). Accordingly, the current study will investigate the relationship of community factors to adjustment and well-being, through self-efficacy. Moreover, these relations will be compared for ethnic and racial minority FGCS and White FGCS.

### **Ethnic and Racial Disparities in College Student Achievement**

The cultural differences between FGCS of varying ethnic and racial backgrounds have been highlighted as worthy of assessment (e.g., Chavous, 2002; Owens et al., 2010; Walpole, 2007). For instance, Chavous (2002) noted a limited focus on ethnic and racial comparison in college student research and Walpole (2007) suggested that the intersecting identities of FGCS be examined because ethnicity and race, gender, and class should not be independently considered. Though a great deal of FGCS literature has focused solely on ethnic and racial minority FGCS (e.g., Bryan & Simmons, 2009; Gloria & Rodriguez, 2000; Owens et al., 2010), few studies have examined ethnic and racial minorities *and* their White counterparts together in a single study to elucidate similarities and differences in their experiences.

In one investigation that did compare ethnic and racial minority (i.e., 85%) and White students, Lundberg, Schreiner, Hovaguimian, and Miller (2007) described student involvement as one factor related to FGCS adjustment. Specifically, African American, Native American, Mexican American, and multiethnic students reported being involved in student organizations, utilizing campus support services, and interacting with faculty and peers, but attaining less academic and personal learning than their White counterparts (Lundberg et al., 2007). This finding suggested that the campus community and available resources appeared to provide fewer

benefits for ethnic and racial minority FGCS (Lundberg et al., 2007). Results such as these, point to the importance of comparing the experiences of ethnic and racial minority FGCS and White FGCS because this knowledge could have key implications for FGCS programming and interventions that are inclusive of, and relevant to, ethnically and racially diverse FGCS.

### **Overview of the Present Study**

Literature on FGCS calls for an examination of ecological and individual factors related to college adjustment and well-being as well as the role of general self-efficacy in these links (Dennis et al., 2005; Plybon et al., 2003). The current online survey study will assess, with structural equation modeling (SEM), the direct and indirect relations between community factors and college student adjustment and personal well-being (i.e., life satisfaction), through general self-efficacy. Utilizing a strength-based approach (e.g., Lopez et al., 2006), a hallmark of counseling psychology, community factors represented in social disorganization theory will be presented as and comprise a *community organization* — higher community SES level, higher residential stability rates, higher two-parent household prevalence, and higher ethnic and racial homogeneity percentage — factor. It is hypothesized that greater community organization will be related directly and indirectly, through self-efficacy, to greater college adjustment and life satisfaction (see Figure 1). An anticipated partial mediation effect will be demonstrated through significant relationships between the following: community organization and general self-efficacy; community organization and college student adjustment; community organization and life satisfaction; general self-efficacy and college student adjustment; and general self-efficacy and life satisfaction. Additionally, an alternative model will be tested that rotates the position of the self-efficacy and community organization variables, such that the direct and indirect relations between self-efficacy to well-being, through community organization, will be investigated (see

Figure 4). Such an examination of a prior alternative model is consistent with proposed best practices for structural equation modeling (SEM) as it minimizes confirmation bias (MacCallum & Austin, 2000). Furthermore, this study will examine the stated models separately for ethnic and racial minority FGCS and White FGCS to determine similarities and differences in the model by ethnic and racial group.

## Chapter 2

### LITERATURE REVIEW

As discussed in the previous chapter, the current study will assess the direct and indirect relations between community organization and college student adjustment and well-being (i.e., life satisfaction), through general self-efficacy. These relationships will be examined in a sample of first-generation college students (FGCS) to inform our understanding of how these factors operate within the lives of students from unique sociocultural backgrounds. Furthermore, the study will expand the existing body of knowledge on ethnic and racial disparities in college student success by evaluating how these relationships operate for ethnic and racial minority FGCS and White FGCS. This study will address multiple calls in the literature to examine ecological and individual factors related to college adjustment and well-being as well as the role of general self-efficacy in these links (Dennis et al., 2005; Plybon et al., 2003). In order to provide a theoretical framework and foundational research to guide the development of the current study, this chapter reviews relevant literature on (a) first-generation college students, (b) community organization and social disorganization theory, (c) community organization's relationship with academic adjustment, (d) community organization's relationship with well-being, (e) the potential mediating role of general self-efficacy in the link between community organization, academic adjustment, and personal well-being, and (f) the importance of considering ethnic and racial disparities in college student success given extensive research conducted with ethnic and racial minority FGCS.

## **First-Generation College Students (FGCS)**

American colleges and universities are continuously working to market higher education in an appealing way to diverse students (Mehta et al., 2011; Prospero & Vohra-Gupta, 2007). In an effort to design programs that increase admission and retention rates, it is essential that institutions use the demographic and socioeconomic information collected from incoming students to inform such work (Mehta et al., 2011). Research assessing factors related to students' persistence in college identified parental education level as one of the most important predictors (Choy, 2001). One subgroup of current and prospective college students impacted by parental education level is *first-generation college students* (FGCS), defined as students who come from a family in which neither of the parents or guardians graduated from college (Mehta et al., 2011). As of 2010, the National Center for Education Statistics (NCES) reported that FGCS composed almost 50% of the population within higher education (U.S. Department of Education, 2010). Consequently, this unique subgroup of college students are the focus of many post-secondary education studies to determine factors that contribute to their success (Mehta et al., 2011; Owens et al., 2010; Pascarella et al., 2003; Prospero & Vohra-Gupta, 2007).

Studies examining the difference between FGCS and non-FGCS have revealed a number of factors that impede FGCS success (Mehta et al., 2011). For instance, Mehta et al. (2011) found that FGCS reported significantly lower family incomes, less social and on-campus involvement, and significantly higher levels of stress compared to non-FGCS. In another study, Barry, Hudley, Cho, and Kelly (2008), utilized a sample of 1,539 predominately White incoming first-year students from four college campuses across the country (36% FGCS) to compare FGCS and non-FGCS on a number of parental support factors. Parental support was defined as instrumental assistance from parents (e.g., help with school work), how often students discussed

college with parents, social and emotional support received from parents, and levels of encouragement received from parents. Findings indicated that FGCS received significantly lower levels of instrumental support from parents than their peers, at least in part because their parents were less experienced and knowledgeable of the college experience. FGCS also reported less discussion of their college experiences with parents; it was suggested that this latter finding be interpreted with caution due to the small effect size and a single item operationalization of the construct (Barry et al., 2008).

Although the previous studies highlight challenges faced by FGCS, more resilient factors have also been identified with this group. For example, in the same Barry et al. (2008) study just discussed, the authors found that FGCS received similar levels of social and emotional support and educational encouragement from parents as their non-FGCS counterparts. Similarly, Prospero and Vohra-Gupta (2007) asked participants (78% ethnic and racial minority) to complete a survey composed of items that assessed academic motivation (i.e., extrinsic, intrinsic, amotivation), academic and social adjustment, and academic achievement. Multiple regression analyses were used to determine if motivational and adjustment dimensions predicted the academic achievement of FGCS and non-FGCS. Overall, Prospero and Vohra-Gupta found that motivation and adjustment accounted for significant variance in academic achievement (i.e., GPA) for FGCS. The authors concluded that FGCS adjustment may be essential to their academic achievement (Prospero & Vohra-Gupta, 2007, p. 972) and programs dedicated to easing FGCS adjustment have proven to be particularly effective in recent years.

The U.S. Department of Education's federal TRIO programs consist of eight different programs pertaining to FGCS of varying ages and education levels (Chaney, 2010). Educational Opportunity Centers, Ronald E. McNair Postbaccalaureate Achievement, Student Support

Services (SSS), Talent Search, Training Program for Federal TRIO Programs Staff, Upward Bound, Upward Bound Math-Science, and Veterans Upward Bound are all grant funded programs aimed to increase the retention and success of FGCS from low-income backgrounds (U.S. Department of Education, 2013). Talent Search, and the Upward Bound programs target potential FGCS during middle and high school, and the Educational Opportunity Centers, Ronald E. McNair Postbaccalaureate Achievement, and Student Support Services (SSS) programs support FGCS within their college environments (U.S. Department of Education, 2013). A national longitudinal evaluation of Student Support Services indicated that FGCS who engaged in these services during their first year showed increased GPA's and were more likely to remain in college or completed their degree program over six years (Chaney, 2010). The evaluation also reported that FGCS benefited from supplemental services outside of SSS beyond their first year of college (Chaney, 2010).

Taken together, these results suggest that FGCS enter higher education with lower family incomes, less parental assistance with their schoolwork, and higher levels of overall stress. Despite these potential challenges, FGCS' motivation to succeed and successful adjustment to the campus environment through tailored support programs has been found to increase their academic achievement. The current study will contribute to the FGCS literature by examining the relationship of community factors on FGCS adjustment and well-being.

### **Community Organization and Social Disorganization Theory**

**Social disorganization theory.** FGCS are socialized by a number of formal and informal institutions that may or may not prepare them for the college experience (Ishiyama, 2007; Madyun, 2011; Sampson & Groves, 1989). A formal institution that inevitably influences one's perception of the world is the community or neighborhood in which one lives.

Understanding the community context of one's development is helpful in determining what social factors enhance or hinder growth. *Social disorganization theory* provides a framework for understanding communities and their relationship with the psychosocial development of residents (Kubrin & Weitzer, 2003; Sampson & Groves, 1989; Shaw & McKay, 1942). More specifically, social disorganization refers to a community's inability to identify common goals and solve chronic problems (Kubrin & Weitzer, 2003). Social disorganization purports that this inability to organize minimizes residents' access to educational, recreational, and health resources essential to healthy youth development (Kingston et al., 2009). Theorists Shaw and McKay (1942) originally identified three factors contributing to social disorganization: SES, residential mobility, and ethnic and racial heterogeneity. As multiple research studies aimed to expand Shaw and McKay's initial theory, the additional factor of prevalence of single-parent households was added (Sampson & Groves, 1989). A number of studies have utilized social disorganization theory as a framework for investigating the relationship between SES, residential mobility, number of single-parent households, and ethnic and racial heterogeneity with community victimization rates and found a positive link in urban and non-urban communities (e.g., Barnett and Mencken, 2002; Kubrin & Weitzer, 2003; Veysey & Messner, 1999).

In a study that spurred studies for the next two decades, Sampson and Groves (1989) analyzed data from the first 1982 British Crime Survey (BCS). The authors noted that, with a sample of 10,905 predominantly British participants, representing 238 British communities, it was one of the few surveys that allowed for macro-level community analysis. The four sources of disorganization identified by social disorganization theory were assessed within the existing dataset by statistically computing and coding self-reported data to reflect SES, residential mobility, single-parent households, and ethnic and racial heterogeneity. Victimization rates, the

outcome variable, were computed by adding the incidents of personal and household crimes committed by a stranger or community member. Sampson and Groves (1989) found that community-level SES, residential mobility, single-parent household prevalence, and ethnic and racial heterogeneity each accounted for significant variance in crime victimization rates, controlling for other important variables (i.e., disorderly teenage peer-group behavior). In other words, greater social disorganization was related to higher victimization rates.

In order to provide a more detailed analysis using more advanced statistical methodology, Veysey and Messner (1999) used structural equation modeling to replicate Sampson and Groves' (1989) study. With the same data set, Veysey and Messner investigated the links between SES, residential mobility, single-parent household prevalence, and ethnic and racial heterogeneity to victimization rates. Additional indicators of social disorganization, suggested by Veysey and Messner (i.e., measures of friendship networks, unsupervised teenage peer groups, and organizational participation), were examined as intervening variables. The authors found that all four social disorganization variables (i.e., low SES, high residential mobility, more single-parent households, higher ethnic and racial heterogeneity) positively predicted crime rates. In addition, both unsupervised peer groups and organizational participation were found to mediate the relationship between SES and crime rates (Veysey & Messner, 1999). Similarly, unsupervised peer groups also mediated the relationship between ethnic and racial heterogeneity and crime (Veysey and Messner, 1999). More simply stated, lower SES and greater ethnic and racial heterogeneity predicted more unsupervised peer groups, which in turn predicted more crime. Taken together, Sampson and Groves' (1989) and Veysey and Messner's (1999) studies demonstrated that community factors identified by social disorganization theory have direct and indirect effects on crime rates in urban communities. However, additional studies were needed

to explore whether these relations were present in non-urban communities as well (Barnett & Mencken, 2002).

Indeed, Barnett and Mencken (2002) investigated social disorganization theory concepts in non-metropolitan (non-metro) counties across 48 contiguous states from 1989-1991 (e.g., 12% ethnic and racial minority). Three social disorganization variables (i.e., SES, residential mobility, and ethnic and racial heterogeneity) predicted FBI violent crime rates. The authors found that ethnic and racial heterogeneity was positively related to crime rates. In addition, SES' relationship to crime rates varied at high and low levels of residential mobility such that crime rates increased when SES was average and residential mobility was high and decreased when SES was low and residential mobility was high. These findings suggested that SES may be a more important determinant of crime rates than residential mobility in non-urban communities (Barnett & Mencken, 2002).

This collection of studies provides evidence that social disorganization variables (i.e., SES, residential mobility, single-parent households, ethnic and racial heterogeneity) consistently predict crime rates in both urban and non-urban areas. An important future direction identified by previous scholars is to move beyond examinations of the relationship between social disorganization community factors and crime rates (e.g., Madyun, 2011) to investigations of the links of community factors to academic outcomes (Madyun, 2011) and well-being (Aneshensel & Sucoff, 1996; McKenzie et al., 2002). Moreover, given Veysey and Messner's (1999) suggestion that "social disorganization may be further specified, not as one construct but rather as several mechanisms by which communities maintain stability" (p. 170), future studies should examine community factors in conjunction with one another, rather than independently. Accordingly, the current study will investigate the relation between the set of community factors

previously identified by social disorganization theory as important (i.e., community-level SES, residential mobility, prevalence of single-parent households, and ethnic and racial heterogeneity) and academic adjustment and well-being. Importantly, in recognition of the strength-based approach that is a hallmark of counseling psychology (Lopez et al., 2006), this set of variables will be termed *community organization* (rather than disorganization) in this study.

**Community organization's relationship with academic adjustment.** Adjustment has been measured in various ways throughout college student research, including academic achievement (Baker & Siryk, 1989; Hertel, 2002; Madyun, 2011; Pittman & Richmond, 2007), social adjustment to campus life and interpersonal relationships (Baker & Siryk, 1989; Gutman, McLoyd, & Tokoyawa, 2005; Hertel, 2002), personal-emotional adjustment (Baker & Siryk, 1989; Gutman et al., 2005; Hertel, 2002; Pittman & Richmond, 2007), and goal commitment/institutional attachment (Baker & Siryk, 1989; Hertel, 2002). The current study's focus on academic adjustment aims to capture one's ability to adjust to college mentally and emotionally (Baker & Siryk, 1989; Gutman et al., 2005; Hertel, 2002; Pennebaker, Colder, & Sharp, 1990; Pittman & Richmond, 2007).

Madyun (2011) reviewed a group of studies that investigated the relationship between social disorganization and the achievement gap for African American students. Madyun stated that a decrease in community SES and increases in residential mobility, single-parent households, and ethnic and racial heterogeneity--- all factors composing social disorganization -- each have been linked to hindering positive socialization within a community. In turn, this negative community socialization leads to dramatic increases in school dropout rates, lower academic grades, weakened social ties, and minimal resources and networks within African American communities (Madyun, 2011). Other studies have found a similar pattern of results in

the link of individual communities factors to academic achievement (Plybon et al., 2003), aspirations to attend college (Stewart, Stewart, & Simons, 2007), one's tendency to use adult support as a coping strategy (Plybon et al., 2002), and overall academic and social adjustment to college (Ostrove & Long, 2007). To this author's knowledge, no one study has examined all four social disorganization variables as indicators of academic adjustment, therefore studies examining the relation of one or two of the variables are reviewed.

SES, one component of social disorganization, has been associated with a number of adolescent development issues, including but not limited to, school failure, delinquency, and reduced productivity (Anderson, Scrimshaw, Fullilove, Fielding, & The Task Force on Community Prevention Services, 2003; Browning & Cagney, 2005; Hughes et al., 2007; Kubrin & Weitzer, 2003; Madyun & Lee, 2010; Mistry & Wadsworth, 2011; Ostrove & Long, 2007; Shaw & McKay, 1942). It has been argued that SES plays a substantial role in the way students are socialized, educated, and prepared for higher education (Mistry & Wadsworth, 2011). In Mistry and Wadsworth's (2011) examination of how scientific evidence can inform prevention efforts for families facing economic hardship, it was theorized that higher SES families are able to invest in their children by providing the material resources (e.g., educational materials at home, extra-curricular activities) that can facilitate their future academic success. Conversely, lower SES families are limited in the material investments they are able to make which, in turn, can compromise the child's development (Mistry & Wadsworth, 2011). As discussed previously, studies suggest that FGCS, in particular, report challenges with college adjustment related to inadequate preparation, limited access to resources, and less family knowledge of the college process (Bryan & Simmons, 2009; Hertel, 2002; Mehta et al., 2011; Owens, 2010; Ting, 2003).

An investigation of the relationship between social class (e.g., self-reported social class grouping, parent's educational level, concerns about financial security) and college adjustment was conducted with a sample of 324 predominately White liberal arts college students (Ostrove & Long, 2007). Findings indicated that students' social class was significantly correlated with both academic and social adjustment in college, such that students who reported lower social class status also reported feeling less adjusted to college in both domains (i.e., academic and social) (Ostrove & Long, 2007). Overall, evidence supporting the relationship between SES and development illustrates the effects of SES on academic adjustment across the lifespan (Mistry & Wadsworth, 2011; Ostrove & Long, 2007). In addition to SES, other social disorganization variables have been investigated in relation to adjustment as well.

Rankin and Quane (2002) investigated residential mobility's relation to academic and social adjustment in a sample of African American youth. Findings supported a direct negative relationship between the two factors in that higher residential mobility was related to lower academic and social adjustment (Rankin & Quane, 2002). With regard to single-parent households, theory indicates that such households may provide more limited socialization opportunities (Deleire & Kalil, 2002). For instance, Deleire and Kalil (2002) argued that children in two-parent households have greater likelihood of engaging in cultural outings, having at least one parent involved in school activities, and exposure to better schools and community resources. These socialization challenges may be linked to academic adjustment. Thompson et al. (1992) conducted a study that compared African American ( $N= 461$ ) and White families ( $N= 377$ ) on the link between single-parent household status and elementary school adjustment. School adjustment was operationalized as student conduct grades. Conduct grades have been found to predict future academic achievement and adjustment in previous studies with children

(Thompson et al., 1992). The most notable finding related to single-parent household status indicated that African American students from mother-only homes exhibited a harder time adjusting compared to their White counterparts from two-parent and mother extended (i.e., mother is the only parent in the home but the father assists) homes. Another point that has been highlighted in previous literature is the disadvantages associated with the single income that is often the circumstance with single-parent households (e.g., Deleire & Kalil, 2002). This underscores the importance of investigating community factors in conjunction with one another as no community factor often operates in isolation.

Another variable linked with college student involvement and adjustment is the ethnic and racial heterogeneity of a college campus (Chavous, 2002). Given that a college campus is a type of community, this body of literature could provide important insights into the link between community factors and adjustment. Chavous (2002) conducted a review of multiple studies addressing the adjustment issues faced by ethnic and racial minority students who attended colleges and universities with higher ethnic and racial heterogeneity. One study analyzed data collected from the National Study on Black College Students to determine the relationship between campus ethnic and racial heterogeneity and college student adjustment (Allen, 1992). Findings indicated that African American students reported lower levels of adjustment when they attended colleges and universities with higher ethnic and racial heterogeneity (Allen, 1992). Similar to the literature on single-parent household prevalence, SES was again identified as an important contextual factor in combination with ethnic and racial heterogeneity (Chavous, 2002). Hurtado, Carter and Spuler (1996) found an analogous pattern with a sample of Latina/o college students (46% Chicano, 21% Puerto Rican, and 33% Other Latina/o [e.g., Cuban]). Specifically, lower ethnic and racial heterogeneity was correlated with higher adjustment levels.

Together, these findings provide some context for the potential issues students may face regarding academic adjustment in the college environment. However, with the exception of the link between SES and adjustment for which there appears to be a consistent and positive relation (e.g., lower SES is related to less adjustment), the links between other social disorganization community factors and college adjustment have received less attention in previous studies. Thus, additional research investigating these links is needed. Furthermore, Hertel's (2002) implications for future research with FGCS stated more attention should be given to ethnic and racial backgrounds, and how other aspects of one's culture (e.g., community background) influence college attendance and values related to intellectual pursuits. It is anticipated that understanding FGCS' community background, which serves as a foundation for their educational journey, will provide student service providers and researchers with a better understanding of what factors serve as potential barriers, aid adjustment, and enhance overall well-being. In an effort to further develop the literature on the relationship between community factors and mental health outcomes (Aneshensel & Sucoff, 1996; Duncan et al., 1994; McKenzie et al., 2002), well-being, as measured by life satisfaction (Diener et al., 1985), will also be examined in the current study.

**Community organization's relationship with personal well-being.** Accumulating research is finding a relationship between community factors, individually and in tandem, and well-being. For instance, Pinquart and Sorensen (2000) synthesized 286 articles that investigated the relationship between SES and life satisfaction across older adult samples. It was hypothesized that SES would have a positive relationship with life satisfaction based on research that attributes low levels of life satisfaction to lower income levels, economic strain, and limited educational and professional success. Articles reviewed in the meta-analysis measured SES by

self-reported income and education levels. Ethnic and racial compositions of the samples were not reported but it was noted that all were nationally and regionally representative (Pinquart & Sorenson, 2000). Results indicated that overall SES was positively correlated with life satisfaction. In addition, the income component of SES was found to have a stronger correlation with life satisfaction than the education level component (Pinquart and Sorenson, 2000). Given that SES is related positively to life satisfaction in older populations, it was anticipated that the same relationship would exist in college-aged groups. Tong and Song (2004) evaluated the association between low SES and life satisfaction in Chinese college students and found that students who identified as low SES, based on China's local minimum social security standard and the average annual income per person in the family, reported significantly lower levels of life satisfaction compared to students of other SES levels (Tong & Song, 2004). While these studies reflect the relationship between individual and family SES on life satisfaction, Dittman and Goebel (2010) extended these investigations by considering community SES level.

Using data collected from the German Socio-Economic Panel (SOEP, 2000-2006), in which a wide range of private households in former East and West Germany were surveyed, Dittman and Goebel (2010) examined the link between community SES level and life satisfaction. The sample consisted of predominantly German born residents, and also included foreigners, and recent immigrants to Germany. It was hypothesized that persons living in communities of higher SES would report more satisfaction with their lives; results confirmed this hypothesis for residents in both East and West Germany. These results persisted even when controlling for covariates such as individual household income, education, and age. Dittman and Goebel's findings suggest that community SES level may be a greater predictor of life

satisfaction than household SES and that this relationship endures differences in age (e.g., late adolescence versus older adulthood) and education level (e.g., college vs. middle school level).

Though positive relationships between SES (i.e., individual, household, neighborhood) and life satisfaction have been consistently reported in the literature with diverse samples, the relation between life satisfaction and community factors such as residential mobility (Farrell et al., 2004), single-parent households (Louis & Zhao, 2002; Scanlon & Devine, 2001), and ethnic and racial heterogeneity (Duffy, 2004; Sam, 1998; Seder & Oishi, 2009) have been examined less frequently. Scanlon and Devine's (2001) review of theoretical and empirical literature found that residential mobility is detrimental to childhood well-being. Specifically, residential mobility is associated with decreased psychological functioning and increased behavior problems. Importantly, these relations are exacerbated by the community factors of SES and single-parent household. However, Scanlon and Devine (2001) concluded that the literature on residential mobility and psychological outcomes is too limited to draw accurate conclusions. However, other studies have continued to examine residential mobility, and other community factors, simultaneously, in relation to well-being.

For example, Farrell et al. (2004) investigated the relationship between social disorganization theory variables (i.e., SES and residential mobility) and life satisfaction. Data was collected from a random sample of 345 households in a Canadian city, which included residential households alone (i.e., excluding businesses, apartment units, vacant homes). Though ethnic and racial composition of the sample was not reported, it was noted that the sample was representative of the city's residents (Farrell et al., 2004). The authors found a significant relationship between residential mobility and life satisfaction such that lower levels of residential mobility were related to higher ratings of life satisfaction; however SES was not significantly

related to life satisfaction (Farrell et al., 2004). Given that the sample was predominately comprised of participants from higher SES backgrounds, this nonsignificant finding may have been due to the truncated variability observed with this variable. Another study examined SES, in addition to social disorganization factor single-parent household status.

Louis and Zhao (2002) investigated the relationship between family SES and single-parent household status on life satisfaction with a sample of ethnically and racially diverse adults (i.e., classified as White, Black, and Other but specific percentages were not reported). It was found that both factors were associated with life satisfaction. In particular, those who reported a lower SES and single-parent household status also reported lower life satisfaction ratings. These relations persisted when controlling for age, gender, ethnicity and race, and education. Bradley and Corwyn's (2004) study included each of the three previously established links, and found that household SES, residential mobility, and single-parent household status were each correlated with ratings of life-satisfaction with a sample of ethnic and racial minority adolescents. Findings confirmed that adolescents reported less life satisfaction when their family SES was lower, residential mobility was higher, and they resided in a single-parent household (Bradley & Corwyn, 2004). Another factor found to contribute to life satisfaction across international populations and college student samples is ethnic and racial heterogeneity.

Sam (1998) examined possible predictors of life satisfaction for a sample of adolescent immigrants living in Norway, who were born in Vietnam, Pakistan, Chile or Turkey. Overall, findings suggested that living in a neighborhood with less ethnic and racial heterogeneity was related to greater life satisfaction (Sam, 1998). A similar pattern of results has been obtained with British adults (Duffy, 2004) and European American college students. With regard to the college students, Seder and Oishi (2009) investigated the relationship between the ethnic and

racial heterogeneity of first year college students' Facebook friends and life satisfaction in a sample of predominantly White college students. The authors found that less ethnic and racial heterogeneity was correlated with higher life satisfaction with their subsample of European American students. Interestingly, there was no relation between ethnic and racial heterogeneity of Facebook friends and life satisfaction for ethnic and racial minority students in the study; however, given the small number of ethnic and racial minority students available for analysis, the study may not have had the power to find significance. Overall, there seems to be ample support for the negative correlation between ethnic and racial heterogeneity and life satisfaction with ethnically and racially diverse and European American samples (Seder & Oishi, 2009).

This collection of theoretical models and empirical studies demonstrate a consistent positive relationship between individual and community SES and life satisfaction, across various samples (e.g., college students, older adults, ethnically and racially diverse); indicating that lower SES levels are predictive of lower ratings of life satisfaction. Community factors such as residential mobility and single-parent household status have also been directly linked to life satisfaction, suggesting a need to examine these factors further. Additionally, less ethnic and racial heterogeneity has been shown to increase life satisfaction in adolescent and adult samples. Thus, accumulating evidence supports investigation of the relationship between community factors and well-being (i.e., life satisfaction). However, an important extension of these prior studies is the examination of SES, residential mobility, single-parent household prevalence, and community ethnic and racial heterogeneity concomitantly in relation to well-being. In addition, similar to Farrell et al.'s (2004) study, an examination of potential mediators between community organization and well-being could be important.

## **Potential Mediating Role of Self-Efficacy**

In an attempt to foster personal agency, individuals often utilize the psychological construct of self-efficacy. *Self-efficacy*, defined as one's self-expectations and beliefs regarding their ability to succeed, influences how people feel, think, motivate themselves and behave (Bandura, 1993). Substantial research has been conducted on the relationship between self-efficacy and psychological functioning (Bandura, 1993; Bisconti & Bergeman, 1999; Cicognani, 2011; Majer, 2009; Solberg & Villarreal, 1997; Wei, Russell, & Zakalil, 2005). Though few studies have examined self-efficacy as a mediator between community background and academic adjustment or well-being, researchers have encouraged an examination of this potential mediation (Plybon et al., 2003). Additionally, support has been established for direct relationships between community factors such as SES (Fasko & Fasko, 1998; Lipincott & German, 2007; Majer, 2009; Tong & Song, 2004; Vuong et al., 2010) and ethnic and racial heterogeneity and self-efficacy (Gloria & Rodriguez, 2000; Steele, 1997). However the link of residential mobility to self-efficacy has yet to be investigated and the relationship between self-efficacy and single-parent household status is less supported in the literature (Gecas, 1989; McMillan & Reed, 1994; Peng, Lee, Wang & Walberg, 1992). Several studies have found a positive correlation between self-efficacy and academic adjustment (Chemers et al., 2001; Phinney & Haas, 2003; Ramos-Sanchez & Nichols, 2007; Zajacova, Lynch, & Espenshade, 2005) and well-being indicators (Bradley & Corwyn, 2004; Cicognani, 2011; Coffman & Gilligan, 2003; Judge, Locke, Durham, & Kluger, 1998; Lent et al., 2005; Tong & Song, 2004).

**Direct relations between community factors and self-efficacy.** Theoretical support has been provided for the association between higher SES and a family's ability to offer better

quality experiences that enhance adolescent self-efficacy (Gecas, 1989; Mistry & Wadsworth, 2011; Schunk & Meece, 2005). Similarly, community SES has been found to be related to the quality of resources, in the form of activities and programs available to children, which can potentially increase or decrease children's level of self-efficacy (Boardman & Robert, 2000; Gecas, 1989; Plybon et al., 2003). The relationship between community SES and individual self-efficacy development was investigated by Boardman & Robert (2000), who sampled a group of ethnically and racially diverse older adults. It was hypothesized that a negative relationship would be found between individual perceptions of self-efficacy and community SES (i.e., measured by community poverty percentage, unemployment, and public assistance rates; Boardman & Robert, 2000). Regression analyses confirmed this hypothesis, indicating a positive relationship between community SES and self-efficacy such that individuals residing in lower SES areas reported lower levels of self-efficacy. With regard to college student populations, Griffiths (2007) compared female college students of varying SES backgrounds on their levels of academic and career self-efficacy. Results revealed a significant difference between students from lower and higher SES backgrounds, such that women from lower SES backgrounds reported lower academic and career self-efficacy (Griffiths, 2007). Similar findings were obtained with a sample of Taiwanese college students (Huang & Hsieh, 2011). Thus, research appears to support a consistent and positive relationship between SES and self-efficacy.

Alternatively, the links between other community variables and self-efficacy have been less well-established. For example, single-parent household status has been purported to be a primary contributing factor to adolescent self-efficacy development (Gecas, 1989; McMillan & Reed, 1994; Peng, Lee, Wang & Walberg, 1992). However, in Peng et al.'s (1992) review of students in urban settings, students in single-parent households held self-efficacy beliefs that

were similar to their peers from two-parent households. Furthermore, these researchers implied that parent-child relationships in terms of healthy parental attachments, positive parental behaviors, and supportive family environments may be related to adolescent self-efficacy more than single-parent household status. Given that single-parent household status has been correlated with other academic outcomes related to self-efficacy (e.g., academic achievement, persistence) (Deleire & Kalil, 2002), a continued analysis of this variable's relationship with self-efficacy is warranted.

Similarly complex findings have been reported with the link of ethnic and racial heterogeneity to self-efficacy. Research consistently demonstrates that ethnic and racial minority students on predominantly White campuses experience different academic and personal experiences than their White counterparts (Allen, 1992; Chavous, 2002; Coffman, 2011; Gloria and Rodriguez, 2000; Hurtado et al., 1996; Lundberg et al., 2007). More specifically, previous scholars have found that African American students attending predominantly White institutions reported lower levels of self-efficacy, suggesting that ethnic and racial heterogeneity can have detrimental effects (Steele, 1997), at least for ethnic and racial minority students. On the other hand, Denson and Chang (2007) found no relationship between level of ethnic and racial heterogeneity and self-efficacy with their sample of ethnically and racially diverse students (39% ethnic and racial minority).

Collectively, the studies reviewed here suggest that, although SES appears to have a consistent and positive relationship with self-efficacy, other community factors have been less studied and offer somewhat contradictory reports. Perhaps a study that examines all the factors simultaneously will offer additional clarity as it seems plausible, and previous studies suggest (e.g., Scanlon & Devine, 2001), that SES, residential mobility, single-parent household status,

and ethnic and racial heterogeneity work collectively in relation to individual outcomes. The inconsistent findings could also be due to self-efficacy's role as an intervening variable. Indeed, Plybon et al. (2003) recommended that more research specifically examine self-efficacy as a mediator between community factors and achievement outcomes. One achievement related outcome examined in relation to community factors and self-efficacy is academic adjustment.

**Direct relations between self-efficacy and academic adjustment.** Considering self-efficacy has been identified as “the most effective measure of self when examining academic adjustment because of the focus on task competency” (Garriot, 2009, p. 162), several studies have examined this relation. Chemers et al. (2001) conducted a longitudinal study with first year college student adjustment, which was measured by participants' satisfaction with academic progress and their intention to persist. Data was collected from an ethnically and racially diverse sample (e.g., 44% ethnic and racial minorities) of first-year students at the University of California, Santa Cruz. It was hypothesized that academic self-efficacy would have a direct positive relationship with college adjustment (Chemers et al., 2001). Results revealed that academic self-efficacy was directly related to adjustment, such that students who reported higher levels of efficacy also reported improved college adjustment. Self-efficacy has also been found to predict college adjustment with samples of predominantly ethnic and racial minority individuals (Garriot, 2009; Zajacova et al., 2005).

For instance, Garriot (2009) investigated the relationship between self-efficacy and college adjustment with a sample of African American college women. A total of 111 students (e.g., 24% FGCS) attending two historically Black universities and two predominantly White universities were surveyed for this analysis. Results were consistent with previous findings with White student samples (Chemers et al., 2001; Ramos-Sanchez & Nichols, 2007) in that greater

self-efficacy was related to greater college adjustment for African American women attending both historically Black and predominantly White universities (Garriot, 2009). In a qualitative dissertation study conducted by Hodges (2011), self-efficacy was also identified as a positive contributor to the academic adjustment of African American males enrolled in the Neighborhood Academic Initiative (NAI) pre-college enrichment program. Hodges (2011) encouraged researchers to further investigate self-efficacy's relationship with college student outcomes for larger samples of African American men.

Particularly relevant to the current study, Ramos-Sanchez and Nichols (2007) found that higher self-efficacy in the beginning of the first year predicted greater college adjustment at the end of the year with their ethnically and racially diverse sample (46% ethnic and racial minority). Vuong et al. (2010) examined the relationship between self-efficacy and academic adjustment with their subsample of first-generation college students, pursuing their second year of study. Participants attending one of five California State Universities participated in the study and the majority of the sample identified as either Hispanic/Latina(o) or White. Results indicated that academic self-efficacy positively predicted academic adjustment for FGCS. Self-efficacy's established relationships with community factors and academic adjustment support its potential mediating role in the community factors-adjustment link. Given that similar patterns of results have been obtained with life satisfaction, self-efficacy may function as a mediator in those links as well.

**Direct relations between self-efficacy and life satisfaction.** Coffman and Gilligan's (2003) investigation of self-efficacy's association with life satisfaction was conducted with a sample of 94 first-year college students enrolled in an introductory psychology course. The sample was predominantly White (87%) and the remaining percentage identified as African

American, Asian, or other (Coffman & Gilligan, 2003). Bivariate correlational analyses revealed that self-efficacy was positively related to life satisfaction. Similarly, Diseth, Danielsen, and Samdal (2012) found that self-efficacy predicted perceived life satisfaction in a sample of Norwegian secondary school students, such that higher levels of self-efficacy predicted higher life satisfaction. Judge et al. (1998) also proposed a model that hypothesized self-efficacy would have a direct effect on life satisfaction with a predominantly White sample of physicians. Life satisfaction was measured with the same scale used in Coffman and Gilligan's (2003) study, as well as this proposed study (i.e., Satisfaction with Life Scale), and results indicated the same positive relationship between self-efficacy and life satisfaction. Though the previous studies confirm the relationship between self-efficacy and life satisfaction for predominantly White populations, related findings have been obtained with ethnically and racially diverse student samples as well (Bradley & Corwyn, 2004; Tong & Song, 2004).

A sample of 310 families, with adolescents between ages 10 and 15 residing in the home, who identified with one of five socio-cultural groups were assessed to investigate the relationship between self-efficacy and overall life satisfaction (Bradley & Corwyn, 2004). Participants identified as African American, Chinese American, Dominican American, Mexican American, or European American. Findings indicated that higher self-efficacy beliefs were related to higher life satisfaction for the entire sample, with the highest correlations present in Mexican and European American participants. This collection of studies indicates an established positive correlation between self-efficacy and life satisfaction for both ethnic and racial minorities and White samples. Given the direct relations supported between (1) community factors and adjustment and well-being, (2) community factors and self-efficacy, (3) self-efficacy and adjustment, and (4) self-efficacy and life satisfaction, the current study will follow the

recommendation of Plybon et al. (2003) and test self-efficacy as a mediator in these links. Specifically, it is hypothesized that community organization will be related, indirectly through self-efficacy, to greater college student adjustment and life satisfaction.

### **Ethnic and Racial Disparities in College Student Achievement**

The cultural differences between FGCS of varying ethnic and racial backgrounds have been highlighted as also worthy of assessment (e.g., Chavous, 2002; Moschetti, & Hudley, 2008; Wartman & Savage, 2008; Walpole, 2007). For instance, Chavous (2002) noted a limited focus on racial comparison in college student research and Walpole (2007) suggested that the intersecting identities of FGCS be examined because ethnicity and race, gender, and class should not be independently considered. Though a great deal of FGCS literature has focused on ethnic and racial minorities solely (e.g., Bryan & Simmons, 2009; Gloria & Rodriguez, 2000; Owens et al., 2010), few studies have examined ethnic and racial minorities *and* their White counterparts together in a single study to elucidate similarities and differences in their experiences. However, those studies that have compared ethnic and racial minority and White groups have reported differences, which suggest that community context is important.

Community organization variables such as community SES, single-parent household status, and ethnic and racial heterogeneity were analyzed as predictors of high school grades amongst a sample of Bay Area California students (Dornbusch, Ritter, & Steinberg, 1991). African American and Non-Hispanic White students were compared in a sample of predominantly White students (e.g., 10% African American students). Results indicated that relations between community SES, single-parent household status, and ethnic and racial heterogeneity and reported grades tended to differ by group (Dornbusch et al., 1991). Although higher ethnic and racial heterogeneity predicted lower grades for both groups, lower SES was

related to lower grades only for the African American students, and single-parent household status only predicted lower grades for White students. These findings demonstrate the importance of community context when considering ethnic and racial disparities in academic achievement (Dornbusch et al., 1991). Community context continues to be important in examinations of the experiences of ethnic and racial minority and White students who are also FGCS (e.g., Bryan & Simmons, 2009; Hertel, 2001; Lundberg et al., 2007; Owens et al., 2010).

Lundberg et al. (2007) compared ethnic and racial minority FGCS and White FGCS on factors relating to adjustment and found that student involvement was a key predictor of adjustment. Though high levels of involvement were found to improve FGCS adjustment, ethnic and racial minority students did not report adjusting as well as their White counterparts (Lundberg et al., 2007). Owens et al. (2010) described this challenge, for African American FGCS, as a dissonance between what they experience in their home communities and what they experience in the college community. In contrast to their home communities, African American, Appalachian, and Latina/o college students reported experiencing resistance, lacking a sense of belonging, and feeling alienated in colleges with higher ethnic and racial heterogeneity (Allen, 1992; Bryan & Simmons, 2009; Gloria & Rodriguez, 2000; Hurtado et al., 1996; Owens et al., 2010). Ultimately these disempowering experiences were related to their chances of achieving academically and completing college (Allen, 1992; Bryan & Simmons, 2009; Gloria & Rodriguez, 2000; Hurtado et al., 1996; Owens et al., 2010). Though Chavous (2002) contends that ethnicity and race are not considered sufficiently in college student research, others (e.g., Coffman, 2011) have cautioned researchers to refrain from examining ethnicity and race as an independent predictor of student outcomes as it negates the acknowledgement of their multiple identities (e.g., social class). Accordingly, the current study will compare the links between

community factors to adjustment and life satisfaction, through self-efficacy, with a sample of ethnic and racial minority FGCS and White FGCS. In this way, ethnicity and race are considered, not as independent variables, but rather as contextual identity constructs.

### **Purpose of the Present Study**

Literature on FGCS calls for an examination of ecological and individual factors relating to college adjustment and well-being as well as the role of general self-efficacy in these links (Dennis et al., 2005; Plybon et al., 2003). The current online survey study will assess, with structural equation modeling (SEM), the direct and indirect relations between community factors and college student adjustment and well-being (i.e., life satisfaction), through general self-efficacy. Utilizing a strength-based approach (e.g., Lopez et al., 2006), a hallmark of counseling psychology, community factors represented in social disorganization theory will be presented as and comprise a *community organization*—higher community SES, higher residential stability rates, higher two-parent household prevalence, and higher ethnic and racial homogeneity—factor. It is hypothesized that the following relationships will exist:

- (1) Community organization will be positively related to self-efficacy, college student adjustment, and life satisfaction.
- (2) Self-efficacy will be positively related to college student adjustment and life satisfaction.
- (3) Community organization will be positively related, indirectly through self-efficacy, to college student adjustment and life satisfaction.

Additionally, an alternative model will be tested. Model 2 will specify that community organization mediates the relationship between self-efficacy and the outcome variables of college adjustment and life satisfaction (see Figure 4). Such an examination of a prior alternative

model is consistent with proposed best practices SEM as it minimizes confirmation bias (MacCallum & Austin, 2000). Finally, based on prior literature which recommends that the experiences of ethnic and racial minority students and White students be investigated independently and compared to elucidate the similarities and differences between groups, the current study will examine the hypothesized model for ethnic and racial minority FGCS and White FGCS.

## Chapter 3

### METHOD

#### Participants

Data from 183 ethnic and racial minority students and 161 White students were utilized in the current study. The majority of the ethnic and racial minority students identified as Hispanic/Latino(a) ( $n = 89, 25.7\%$ ), followed by African American ( $n = 42, 12.1\%$ ). An equal number identified as Asian/Asian American/Pacific Islander ( $n = 22, 6.4\%$ ) or Multiracial ( $n = 22, 6.4\%$ ), followed by American Indian ( $n = 8, 2.3\%$ ), and two participants did not report their ethnic or racial identities (.6% missing). Participants' age ranged from 18 to 60 years old ( $M = 21, SD = 5.36$ ). A majority of the sample identified as female ( $n = 266, 76.9\%$ ) and the remaining participants identified as male ( $n = 80, 23.1\%$ ). Sexual orientation identities included exclusively heterosexual ( $n = 253, 73.4\%$ ), mostly heterosexual ( $n = 56, 15.3\%$ ), bisexual ( $n = 12, 3.5\%$ ), exclusively lesbian/gay ( $n = 10, 2.9\%$ ), with a few who identified as mostly lesbian/gay ( $n = 4, 1.2\%$ ), and the remainder identified as Other (e.g., Pansexual, Demisexual;  $n = 5, 1.5\%$ ) or did not report sexual orientation ( $n = 4, 1.2\%$  missing). Most of the participants were born in the United States ( $n = 313, 90.8\%$ ), a small percentage were born outside of the United States ( $n = 30, 8.7\%$ ), and the remaining participants did not report their birthplace ( $n = 2, .6\%$  missing). The sample's predominantly reported social classes were working ( $n = 134, 38.7\%$ ) or middle ( $n = 127, 36.7\%$ ). Other participants identified their class as lower ( $n = 60, 17.3\%$ ), upper middle ( $n = 22, 6.4\%$ ), upper ( $n = 1, .3\%$ ), or did not report class ( $n = 2, .6\%$  missing).

The majority of participants were U.S. domestic students ( $n = 334, 96.5\%$ ), approximately five participants were international students ( $n = 7, 2\%$  missing), and seven

students (2%) did not report their international students status. Twenty-eight percent ( $n = 100$ ) of participants were first-year undergraduates, and the remainder of the sample was split between second-year ( $n = 57, 16.5\%$ ), third-year ( $n = 83, 24\%$ ), and fourth-year ( $n = 79, 22.8\%$ ) undergraduates ( $n=6, 1.7\%$  missing).

A total of 280 college and university-related contacts were identified and asked to participate and/or share the survey from the Southeast ( $n = 106, 37.9\%$ ), Midwest ( $n = 56, 20\%$ ), Northeast ( $n = 46, 16.4\%$ ), West ( $n = 37, 13.2\%$ ), Southwest ( $n = 23, 8.2\%$ ), and Northwest ( $n = 4, 1.4\%$ ) regions of the United States, in addition to eight national contacts (2.9%). Of those contacts, the final sample was composed of 128 students from the Southwest (37%), 85 from the Northeast (24.6%), 57 from the Southeast (16.5%), 12 from the Northwest (3.5%), 41 from the West (11.8%), and 14 from the Midwest (4%) regions of the United States ( $n = 9, 2.6\%$  missing). Comparable numbers of students attended four-year public ( $n = 199, 57.5\%$ ) and private ( $n = 140, 40.5\%$ ) institutions ( $n = 7, 2\%$  missing). Participants attended ethnically and racially diverse colleges and universities ( $n = 172, 49.7\%$ ), predominantly White institutions ( $n = 158, 45.7\%$ ), historically Black colleges or universities ( $n = 2, .6\%$ ), or did not report the type of institution ( $n = 14, 4\%$ ) attended.

## **Measures**

**Demographic questionnaire.** A brief questionnaire at the conclusion of the survey asked participants to report information about their current student status and cultural background. Items related to the inclusion criteria asked participants to report their age, if they attend a 4-year public or private institution in the United States, and parental education status. Data informing the community organization factors included demographic items about the participant's community SES, residential stability, prevalence of two-parent households, and

ethnic and racial homogeneity in their identified community. Other items assessed participant's ethnicity and race, gender, sexual orientation, religious affiliation and activity level, academic major, and how their education is funded (e.g., loans).

**Community organization.** Five selected items from the demographic questionnaire (i.e., community SES level [1 item], residential stability [2 items], prevalence of two-parent households [1 item], ethnic and racial homogeneity [1 item]), and the Neighborhood Disorder (ND) subscale of The Chicago Community Survey (Community Survey; Earls, Brooks-Gunn, Raudenbush, & Sampson, 1995) were used to assess community organization in the present study. The Community Survey is a commonly-utilized ecological measure (Burchfield, 2009; Cagney, Browning, & Wen, 2005; Earls et al., 1995) comprised of 17 subscales and designed to measure community factors identified in social disorganization theory (Barnes, Sampson, Kindlon, & Reiss, 1997).

**Community SES level.** The ND subscale (Earls et al., 1995), in combination with a single-item SES question, was utilized to assess community SES. The ND subscale consists of six items intended to measure the physical appearance and activities that occur in a given community. A sample item from the subscale is, "How much of a problem are vacant or deserted houses or storefronts". Responses are rated on a 3-point continuum (1 = *A big problem*, 2 = *Somewhat a problem*, and 3 = *Not a problem*). A composite community SES score was created by conducting a principal component analysis (PCA) of the six ND items and the community SES item reported on the demographic questionnaire. The resultant factor score, representing a linear combination of the items that accounted for most of the variance in community SES level (Stevens, 2002) were utilized in the subsequent analyses.

Reliability of the ND subscale was established through a pilot study in six Chicago census tracts--high-income White, Hispanic, and African-American neighborhoods, and low-income White, Hispanic, and African-American neighborhoods (17% aged 18-25; Barnes et al, 1997). An alpha coefficient of .86 was established for this subscale and reported as one of the highest in the survey (Barnes et al., 1997). With regard to validity, systematic social observations of neighborhood disorder were moderately correlated with reports of neighborhood disorder on the Community Survey ( $r = .56$ ) (Sampson & Raudenbush, 1999). The Cronbach's alpha value for the current sample was .90.

***Residential stability, two-parent households, and ethnic and racial homogeneity.***

Residential stability items were derived and informed by two commonly-used and validated items from urban research (Sampson, 1997; Sampson & Graif, 2009; Sampson, Morenoff, & Earls, 1999). Participants answered two questions that asked, "To the best of your knowledge, how many residents in your neighborhood have lived there for five years or more?" and "To the best of your knowledge, how many residents in your neighborhood own their homes?" Both items were rated on a continuum of 1= *almost all residents (75%-100%)* to 5= *very few residents (less than 25%)*. To maintain a positive valence, these items were reverse coded so that higher ratings were equivalent to lower residential mobility rates. Two-parent household prevalence and ethnic and racial homogeneity were assessed with single items. More specifically, prevalence of two-parent households was assessed with the question, "To the best of your knowledge, how many families in your neighborhood are headed by one parent or guardian?" Participants rated the item on a continuum of "1= *almost all families (75%-100%)* to 5= *very few families (less than 25%)*. Ethnic and racial homogeneity was assessed with the question, "People

from my neighborhood are ethnically or racially:” Participants rated the item on a continuum of 1= *predominantly unlike me (less than 25%)* to 5= *predominantly like me (75%-100%)*.

**General self-efficacy.** General self-efficacy was assessed with the General Self-Efficacy Scale (GSE; Chen, Gully & Eden, 2001). The GSE is an eight-item scale intended to measure one’s thoughts about their ability to perform across various achievement situations (Scherbaum, Cohen-Charash, & Kern, 2006). A sample item from the scale is, “I will be able to achieve most of the goals I set for myself”. Items were rated on a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*). Items were averaged with higher scores indicating higher levels of self-efficacy. Scherbaum et al. (2006) reported Chronbach’s alphas between .85 to .90 with their sample of undergraduates (ethnicity and race not reported) in several upper-level psychology courses at a large mid-Atlantic university. In terms of validity, self-efficacy has been found to be positively related to self-esteem ( $r = .87$ ) with another sample of undergraduate students enrolled in upper-level psychology courses (ethnicity and race not reported; Chen et al., 2001). The Cronbach’s alpha value for the current sample was .91.

**College student adjustment.** Adjustment to college was assessed with the College Adjustment Test (CAT; Pennebaker et al., 1990). The CAT is a 19-item scale designed to measure the various thoughts and feelings students’ experience regarding college over the past week. A sample item from the scale is, “Worried about how you will perform academically at college”. Items were rated on a 7-point Likert-type scale from 1 = *Not at all* to 7 = *A great deal*. The algorithm provided by the scale developers was used to obtain an overall adjustment score and higher scores indicated better adjustment. A Chronbach’s alpha of .79 and a two month test-retest reliability coefficient of .65 were obtained for the CAT total score with two entering college student samples (ethnicity and race not reported; Pennebaker et al., 1990). In addition,

with the same college samples, a factor analysis supported the hypothesized three-factor structure of the CAT, evidencing good construct validity (Pennebaker et al., 1990). The Cronbach's alpha value for the current sample was .62.

**Life satisfaction.** Life satisfaction was assessed with Diener et al.'s (1985) Satisfaction with Life Scale (SWLS). The SWLS is a five-item scale intended to measure psychological well-being. A sample item from the scale is, "In most ways my life is close to my ideal". Items were rated on a 7-point Likert type scale (i.e., 1= *strongly disagree* to 7= *strongly agree*). Items were summed with higher scores indicating greater satisfaction with life. Diener et al. obtained Cronbach's alpha values greater than .80 with multiple undergraduate samples (ethnicity and race not reported). With regard to validity, the SWLS has been found to correlate positively with self-esteem and negatively with measures of psychological distress with a sample of ethnically and racially diverse college students (percentages not provided; Pavot & Diener, 1993). The Cronbach's alpha value for the current sample was .86.

## **Procedures**

**Recruitment.** In order to intentionally target participants who identified as FGCS attending four year colleges or universities in the United States, a list of institutional contacts was developed for the current study. The institutional contact list was compiled by a graduate student research team who identified key FGCS contacts at several public and private institutions across the United States through websites, directories, and word of mouth. FGCS contacts were defined as those who work in a capacity that develops, implements, and/or promotes FGCS services at a given institution. As each contact was established, they received an email or phone call explaining the study and requesting that the survey link be shared with their FGCS network. A snowball sampling method was then used by having each contact refer the team to similar

contacts within and outside their institution. Additionally, students who identify as first generation, but may not have access to or engage in FGCS services were contacted through participation requests sent to (a) student affairs employees and email lists, (b) student activities personnel and email lists, and (c) various student organizations email lists.

**Online survey dissemination.** Each measure was adapted into a Survey Monkey platform for online dissemination. Participants received an email explicitly stating the inclusion criteria (i.e., 18 years or older, first generation student status, attending a 4-year public or private university in the U.S.). Participants who met the criteria were encouraged to take a brief 20 to 25-minute survey to assess the culture of their home community and their current college experiences. Once they clicked the survey link, a page introducing participants to the study appeared that reiterated the inclusion criteria. The following page requested participant's consent before they proceeded to the survey items. Each participant answered items on the Neighborhood Disorder subscale, General Self-Efficacy Scale, College Adjustment Test, and Satisfaction with Life Scale and ended by completing the demographic questionnaire. In addition, four validity check items were included in the survey. An example validity check item is, "Please click on the button 'Strongly agree' ". These items were intended to minimize spurious responding. Data from participants missing more than one validity check item was not analyzed. Once the respondent completed all the survey items, they received confirmation of their responses and a debriefing statement with additional details about the study and researcher's contact information.

### **Preliminary Analyses**

**Missing data and data replacement.** Missing data were examined and addressed prior to proceeding with analyses. A total of 131 participants missing more than 25% of the entire survey, including demographics, were excluded from further analyses. Next, 30 participants who skipped or incorrectly answered one or more of the four validity check items were also eliminated. Lastly, 19 participants missing more than 20% of responses on any measure or item of interest (e.g., community organization indicators, self-efficacy, college adjustment, and life satisfaction) were eliminated. Ipsative (i.e., valid) or individual mean substitution, an effective method for addressing small amounts of missing data (e.g., less than 20% per measure), as was the case with the current investigation, was utilized to replace data points for participants missing less than 20% of the data on a given measure (Parent, 2012).

In an attempt to understand why participants may have discontinued the survey an independent-samples t-test was conducted to compare the first scale of the survey, neighborhood disorder (i.e., a measure of physical disorder within the community environment; Barnes et al., 1997), for those who completed the entire survey and those who did not complete the entire survey. There was not a significant difference in neighborhood disorder levels for those who completed the survey ( $M = 12.85, SD = 3.78$ ) and those who did not complete the survey ( $M = 12.90, SD = 3.56$ );  $t(383) = -.086, p = .236$ . Therefore, participants may have discontinued the survey for extraneous reasons that were unrelated neighborhood disorder.

**Principal component analysis for SES variables.** Principal component analysis (PCA) was utilized to generate a composite community SES factor score from the six Neighborhood Disorder subscale items and the community SES demographic item. PCA is a data reduction technique designed to convert a number of potentially correlated observed variables into a set of linear values (Stevens, 2002). The associated factor scores represented a linear combination of the items accounting for most of the variance in community SES level (Stevens, 2002).

All items were constrained to load on a single factor, which accounted for 57.33% of the total variance in the observed variables. As shown in Table 1, neighborhood disorder subscale items related to the sale and use of drugs (Item 5) and groups of teenagers or adults hanging out in the neighborhood and causing trouble (Item 6) exhibited the highest factor loadings (i.e., > .80; Costello & Osborne, 2005). The remaining items from this subscale also loaded highly on the factor (i.e., > .75). The item with the lowest factor loading was the community SES demographic item (.273). These results suggest that the community SES variable was most reflective of level of safety in the community rather than SES.

**Descriptive statistics and intercorrelations.** Descriptives and intercorrelations are reported in Table 2. Prior to conducting SEM analyses, SPSS 21 was utilized to examine descriptive statistics and independent relations between the variables of interest (i.e., community organization indicators, self-efficacy, college adjustment, life satisfaction). Mean scores for previously established and validated study measures were similar to scores obtained with other undergraduate college samples. Specifically, the mean score obtained for self-efficacy with the current sample ( $M = 4.30$ ,  $SD = .54$ ) was comparable to that obtained by Marder (2009) with a sample of predominantly female undergraduate college students ( $M = 4.05$ ,  $SD = .51$ ). The current mean score for college adjustment ( $M = 82.57$ ,  $SD = 11.85$ ) was comparable to results

reported by Pennebaker et al. (1990) for an undergraduate college student sample ( $M = 85.6$ ,  $SD$  was not reported). The current sample's reported life satisfaction ( $M = 23.72$ ,  $SD = 6.26$ ) also was similar to that of an U.S. American college student sample (i.e.,  $M = 23.5$ ,  $SD = 6.4$ ; Pavot & Diener, 1993).

The community organization factor was scored such that higher community organization levels would be associated with higher levels of the following: community SES level, residential stability, two-parent household prevalence, and ethnic and racial homogeneity. Bivariate correlations between these indicator variables indicated that community SES level had a positive relationship with two-parent household prevalence ( $r = .181$ ,  $p = .001$ ), a negative relationship with residential stability ( $r = -.122$ ,  $p = .024$ ), and a nonsignificant relationship with ethnic and racial homogeneity ( $r = .048$ ,  $p = .370$ ). Residential stability was negatively related to both two-parent household prevalence ( $r = -.200$ ,  $p < .001$ ) and ethnic and racial homogeneity ( $r = -.124$ ,  $p = .022$ ). Two-parent household prevalence was not significantly related to ethnic and racial homogeneity ( $r = -.036$ ,  $p = .502$ ).

Two of the three research hypotheses were tested when reviewing bivariate correlation results, namely: (1) community organization will be positively related to self-efficacy, college student adjustment, and life satisfaction and (2) self-efficacy will be positively related to college student adjustment and life satisfaction. Because community organization cannot be created as a factor in correlational analyses, each community organization indicator was assessed in relation to the outcome variables.

***Hypothesis 1: Community organization will be positively related to self-efficacy, college student adjustment, and life satisfaction.*** Regarding each of the indicator variables (i.e., community SES level, residential stability, two-parent household prevalence, ethnic and racial

homogeneity), there were no significant relationships between any of these variables and self-efficacy. Community SES level was negatively related to college student adjustment ( $r = -.178, p < .001$ ) and residential stability was negatively related to life satisfaction ( $r = -.143, p = .008$ ).

***Hypothesis 2: Self-efficacy will be positively related to college student adjustment and life satisfaction.*** In partial support of the hypothesis, self-efficacy was negatively related to college student adjustment ( $r = -.233, p < .001$ ) and positively related to life satisfaction ( $r = .423, p < .001$ ).

**Appropriateness of sample for SEM.** SEM was chosen for the current analyses because it allows for the examination of direct and indirect relationships between multiple variables. Based on Kline's (1998) recommendation of five to 10 cases per estimated parameter for SEM analyses, a sample of 80 to 160 participants per ethnic and racial category (i.e., ethnic and racial minority FGCS and White FGCS) was needed. The current study's sample of 183 ethnic and racial minority participants and 161 White participants exceeded this criteria.

Univariate and multivariate normality were also examined. Weston and Gore's (2006) criteria for univariate normality were met; the skewness values for each variable were less than 3, and kurtosis values were less than 10. Multivariate normality was supported by nonsignificant Mardia's normalized estimate of multivariate kurtosis ( $p > .05$ ) and multivariate outliers ( $p > .001$ ). Based on these findings, the current sample was deemed appropriate for SEM analyses.

### **SEM Examining Direct, Indirect, and Mediated Relations**

SEM analyses testing the proposed relationships between community organization (predictor variable), self-efficacy (potential mediator), and college adjustment and life satisfaction (outcome variables), was conducted with Amos 21.0 software. The proposed model (see Figure 1) hypothesized that community organization would be directly related to college

student adjustment and life satisfaction as well as indirectly related to these outcomes through the partial mediator of self-efficacy. To provide a general representation of the hypothesized relations, the model was first tested with the entire sample (i.e., ethnic and racial minority FGCS and White FGCS). Next, a multi-group SEM analysis was conducted to examine the proposed model for both groups independently. Nested models with (a) all paths freely estimated and (b) all paths constrained to equality were compared to determine if the relationship between exogenous and endogenous variables included in the hypothesized model differed significantly by group.

The significance of direct effects was tested by significant path coefficients. Bootstrapping procedures were used to identify significant indirect effects (Preacher & Hayes, 2004). Bootstrap procedures involved creating 1,000 samples from the original data set through random sampling and replacement and then deriving 1,000 estimates of each path coefficient. Mean indirect effects were calculated for the following standardized path coefficients: (a) community organization to self-efficacy and (b) self-efficacy to each outcome variable (i.e., college student adjustment and life satisfaction). The lower and upper bounds of the 95% confidence intervals for the mean indirect effects were then estimated. If a confidence interval does not include zero, the indirect effect is considered significant at the .05 level (Shrout & Bolger, 2002). Finally, model fit was evaluated using root mean square error of approximation (*RMSEA*), standardized root mean residual (*SRMR*), and comparative fit index (*CFI*) fit indices. Criteria for acceptable fit with the current sample size suggest values less than or equal to .10 for *RMSEA* and *SRMR* and greater than .90 for *CFI* (Weston & Gore, 2006). Chi-square difference tests were used to compare the fit between nested models.

**Total sample SEM.** The factor loadings of each indicator variable for the construct of community organization were examined. Community SES level ( $\beta = .409, p < .001$ ) and two-parent household prevalence ( $\beta = .418, p < .001$ ) were positively related to community organization, whereas residential stability was negatively related ( $\beta = -.402, p < .001$ ) to community organization. Ethnic and racial homogeneity did not load significantly on community organization ( $\beta = .108, p = .205$ ). Overall, the hypothesized SEM model demonstrated good model fit ( $\chi^2(12) = 20.230, p = .063$ ;  $RMSEA = .045$ ,  $SRMR = .043$ ,  $CFI = .940$ ). This model accounted for 1% of the variance in self-efficacy, 28% of the variance in life satisfaction, and 9% of the variance in college student adjustment.

**Hypothesis 1: Community organization will be positively related to self-efficacy, college student adjustment, and life satisfaction.** Community organization was negatively related to college student adjustment ( $\beta = -.179, p = .044$ ) and positively related to life satisfaction ( $\beta = .315, p < .001$ ), as indicated in Table 3. There was no significant relationship between community organization and self-efficacy ( $\beta = -.117, p = .186$ ). Therefore, hypothesis 1 was partially supported.

**Hypothesis 2: Self-efficacy will be positively related to college student adjustment and life satisfaction.** In partial support of the hypothesis, self-efficacy was negatively related to college student adjustment ( $\beta = -.254, p < .001$ ) and positively related to life satisfaction ( $\beta = .459, p < .001$ ) (see Table 3).

**Hypothesis 3: Community organization will be positively related, indirectly through self-efficacy, to college student adjustment, and life satisfaction.** Bootstrapping results did not support the hypothesis; there were no significant indirect links between community organization and college student adjustment or life satisfaction through self-efficacy.

## Multi-group Comparisons

As mentioned above, models with all paths freely estimated and all paths constrained to equality were compared for ethnic and racial minority FGCS and White FGCS. The chi-square difference test for the freely estimated model and the constrained model indicated that the constrained model provided a significantly worse fit to the data ( $\Delta\chi^2(5) = 20.804, p = .001$ ), thus the freely estimated model was accepted.

**Freely estimated models.** The freely estimated multi-group comparison model demonstrated good fit ( $\chi^2(24) = 26.534, p = .327$ ;  $RMSEA = .018, SRMR = .040, CFI = .986$ ). Community SES level ( $\beta = -.441, p < .001$ ) and two-parent household prevalence ( $\beta = -.575, p < .001$ ) were negatively related to community organization for the ethnic and racial minority FGCS. However, residential stability ( $\beta = .381, p < .001$ ) and ethnic and racial homogeneity ( $\beta = .282, p = .004$ ) were positively related. Model testing with White FGCS indicated that community SES level ( $\beta = .248, p = .030$ ), two-parent household prevalence ( $\beta = .261, p = .025$ ), and ethnic and racial homogeneity ( $\beta = .717, p = .001$ ) were positively related to community organization, whereas residential stability ( $\beta = -.568, p = .001$ ) was negatively related to community organization (see Table 3). This model explained 16% of the variance in self-efficacy, 6% of the variance in college adjustment, and 12% of the variance in life satisfaction for ethnic and racial minority FGCS. For White FGCS, the model accounted for 2% of the variance in self-efficacy, 9% of the variance in college adjustment, and 35% of the variance in life satisfaction.

***Hypothesis 1: Community organization will be positively related to self-efficacy, college student adjustment, and life satisfaction.*** Community organization was positively related to self-efficacy for ethnic and racial minority FGCS ( $\beta = .404, p < .001$ ). There was no significant

direct relationship between community organization and college student adjustment ( $\beta = .200, p = .087$ ), however community organization was negatively related to life satisfaction ( $\beta = -.226, p = .047$ ) with this group. With regard to White FGCS, community organization was not significantly directly related to self-efficacy ( $\beta = .154, p = .576$ ), college student adjustment ( $\beta = .066, p = .515$ ), or life satisfaction ( $\beta = .161, p = .111$ ). Thus, the hypothesis was partially supported for ethnic and racial minority FGCS, but was not supported for White FGCS.

***Hypothesis 2: Self-efficacy will be positively related to college student adjustment and life satisfaction.*** Self-efficacy was negatively related to college student adjustment ( $\beta = -.251, p = .004$ ) and positively related to life satisfaction ( $\beta = .376, p < .001$ ) for ethnic and racial minority FGCS. Similar results were seen with White FGCS (i.e., college student adjustment, [ $\beta = -.317, p = .003$ ]; life satisfaction, [ $\beta = .546, p = .002$ ]).

***Hypothesis 3: Community organization will be positively related, indirectly through self-efficacy, to college student adjustment and life satisfaction.*** Community organization was negatively indirectly related to college student adjustment, through the mediator self-efficacy (95% CI =  $-.251, -.032, p = .003$ ), such that higher community organization was related to higher self-efficacy, which in turn was associated with lower college student adjustment. Community organization was positively indirectly related to life satisfaction through self-efficacy (95% CI =  $.059, .348, p = .002$ ), such that higher community organization was related to higher self-efficacy, which in turn was associated with greater life satisfaction for ethnic and racial minority FGCS. However, no significant indirect effects were found for White FGCS.

As a final comparison, the pathway that was nonsignificant for both the ethnic and racial minority FGCS and White FGCS (i.e., community organization  $\rightarrow$  college adjustment) was dropped to determine whether this more parsimonious model would provide a better fit to the

data. A chi-square difference test indicated that the modified model provided a significantly worse fit to the data ( $\Delta\chi^2(4) = 21.783, p < .001$ ). Consequently, the original freely estimated model was retained.

### **Alternative Structural Equation Model**

To lower the threat of confirmation bias (MacCallum & Austin, 2000), an alternative model investigated the potential mediating role of community organization in the relationship between self-efficacy and the outcome variables of college student adjustment and life satisfaction (see Figure 4).

**Freely estimated for the total sample.** Overall, the alternative model demonstrated a good fit to the data ( $\chi^2(12) = 20.230, p = .063; RMSEA = .044, SRMR = .0429, CFI = .941$ ). Although fit index results were within acceptable guidelines (Weston & Gore, 2006), a review of the path coefficients with this model indicated that a majority were nonsignificant (see Table 3). Indeed, the only significant path coefficients were between self-efficacy and the two outcome variables: college student adjustment ( $\beta = -.254, p < .001$ ) and life satisfaction ( $\beta = .459, p < .001$ ). In addition, there were no significant indirect effects in this model. Taken together, this evidence suggests that the original hypothesized model better explained the data and was therefore selected as the best fitting model for the current data

## CHAPTER 5

### DISCUSSION

The present study is the first to examine social disorganization theory in the context of first-generation college student (FGCS) outcomes. Community attributes represented in social disorganization theory that comprised the *community organization* factor utilized in the current investigation included community SES level, residential stability, two-parent household prevalence, and ethnic and racial homogeneity. Previous studies suggest that higher levels of the aforementioned community factors are indications of an organized community (Sampson & Groves, 1989) and are directly related to better academic adjustment and life satisfaction (e.g., Bradley & Corwyn, 2004; Madyun, 2011; Scanlon & Devine, 2001). These direct associations, as well as the indirect relations between community organization and the outcome variables through self-efficacy, were investigated. Three sets of hypothesized relationships were considered for the total sample, ethnic and racial minority FGCS, and White FGCS: (1) Community organization is positively related to self-efficacy, college student adjustment, and life satisfaction, (2) Self-efficacy is positively related to college student adjustment and life satisfaction, and (3) Community organization is positively related, indirectly through self-efficacy, to college student adjustment and life satisfaction.

Mean scores for previously established and validated study measures of self-efficacy (Marder, 2009), college adjustment (Pennebaker et al., 1990), and life satisfaction (Pavot & Diener, 1993) were similar to scores obtained with other undergraduate college samples. Hypothesis 1 was not supported when testing the first and second hypotheses through bivariate correlations. None of the indicator variables comprising the community organization factor were significantly related to self-efficacy. Furthermore, contrary to expectation, higher community

SES level was associated with lower college student adjustment, and higher residential stability was related to lower life satisfaction. Hypothesis two was partially supported in that higher self-efficacy was related to lower college adjustment and higher life satisfaction. Bivariate correlation results suggest that the individual indicators of community organization are not predictive of self-efficacy, college student adjustment, and life satisfaction as anticipated. Although these bivariate correlation results did not support the hypotheses, examining the indicators of community organization collectively provided results that were more aligned with some of the hypotheses. Similar to previous investigations, creating a community organization factor that investigated the simultaneous impact of various community factors was more effectual than testing each indicator separately (Hurtado et al., 1996; Ostrove & Long, 2007; Rankin & Quane, 2002; Thompson et al., 1992).

Beyond examining bivariate correlations, it was also important to evaluate the relationship between each indicator variable and the community organization factor to inform our understanding of the underlying construct. The total sample SEM indicated that two of the four indicator variables loaded significantly on community organization as anticipated. Higher community organization was associated with higher community SES level as well as two-parent household prevalence. Results also suggested that lower residential stability was related to higher community organization and that ethnic and racial homogeneity was not significantly related to community organization in this model. The nonsignificant relationship between ethnic and racial homogeneity and community organization has also been supported previously. Bouffard and Muftic (2006) attributed this finding to the impact of ethnic and racial change (i.e., turnover), which was not measured in the current study. It is possible that the speed of ethnic and racial change in a community may be more predictive of social disorganization than the

ethnic and racial distribution (i.e., ethnic and racial homogeneity) of the community (Bouffard & Muftic, 2006). Overall, the inconsistent relationships found between the indicator variables (i.e., community SES, residential stability, two-parent households, ethnic and racial homogeneity) and community organization (as defined by social disorganization theory) suggest that this factor may be measuring another construct, such as community type (e.g., at-risk).

The relationships between the variables of interest were modified, however, when examined in a single SEM model with the community organization factor predicting college student adjustment and life satisfaction directly and indirectly through self-efficacy. With regard to the first hypothesis, community organization was not directly related to self-efficacy but was negatively related to college adjustment and positively related with life satisfaction. Thus, Hypothesis 1 was partially supported. If community organization is measuring a particular community type, as suggested above, then the total sample reflected a community with higher SES, higher residential stability, and more two-parent households. It appears that living in this type of community does not predict students' level of self-efficacy but does decrease their ability to adjust in college and increase their overall life satisfaction. The relation between the total sample's reported community type and lower college student adjustment was unexpected and may be attributed to students experiencing a college environment that differs from their home community. Students who are privileged in ways that are different from their college peers (e.g., higher community SES level, two-parent household) may experience a form of culture shock in college that hinders their adjustment. It is possible that exposure to diverse others may contradict such students' worldview and that adjusting to or understanding these differences may be difficult for some students (Dunlap, Scoggin, Green, & Davi 2007). The positive relationship

between community organization and life satisfaction is consistent with previous findings (Bradley & Corwyn, 2004; Louis and Zhao, 2002).

Hypothesis 2 was also partially supported. More specifically, self-efficacy was negatively related to college student adjustment but positively linked with life satisfaction. The unexpected negative relationship between self-efficacy and college student adjustment may be due to the use of a general self-efficacy measure in the current study. Some educational literature contests the utility of general self-efficacy measures, suggesting that researchers use the most specific measurement of efficacy that corresponds to the targeted behavior (Bandura, 1995; Choi, 2005; Pajares, 1997). General self-efficacy measures have been critiqued for asking participants to make judgments about their abilities without a specific task in mind. Additionally, general assessments of ability are less predictive of context specific performance (Pajares, 1997). Therefore, college self-efficacy may have been a more appropriate measure to correlate with college adjustment because students would report their specific beliefs about their college-related abilities. The high levels of general self-efficacy in this FGCS sample may reflect their beliefs about succeeding in life overall, which may have propelled them to be the first in their families to attend college, but not necessarily positively predict their level of college adjustment (Vuong et al., 2010). Despite levels of general efficacy, students' status as FGCS could have interfered with their ability to adjust due to unfamiliar and unexpected college-related challenges (Hertel, 2002).

Another possible explanation for the negative relation association between self-efficacy and college adjustment is the scoring procedures for the College Adjustment Test (CAT). The scale developers provide a scoring key allowing for the computation of three subscales (i.e., positive affect, negative affect, homesickness) as well as an overall adjustment score. The

current study computed and utilized overall college adjustment. However, previous studies have used the subscales of this measure and reported relationships with self-efficacy (Marder, 2009) and other protective factors in the expected positive direction (Pennebaker et al., 1990). Examining the college adjustment subscales may have provided a clearer picture of potential relationships between community organization and college adjustment, or self-efficacy and college adjustment. Thus, the current study's findings may have resulted from the use of total college adjustment score as opposed to subscale scores used in prior research.

Self-efficacy was not found to mediate the relationships between community organization and either college adjustment and life satisfaction. This was contrary to expectation (Plybon et al., 2003), but may be due to the underlying construct of community organization in the current study representing what could be considered a type of community (e.g., how the streets look, how the residents look, how families and parents look), rather than community organization (e.g., higher SES level, increased residential stability, higher two-parent household prevalence, and greater ethnic and racial homogeneity) as discussed above. This was likely a consequence, at least in part, of using the neighborhood disorder subscale items (i.e., a measure of physical disorder within the community environment; Barnes et al., 1997) as indicators of community SES level. However, examining these relationships by ethnic and racial grouping (i.e., ethnic and racial minority FGCS and White FGCS) provided some clarity about what the community organization factor potentially measures in this study and how the factor was related to self-efficacy, college student adjustment, and life satisfaction for each group.

In the freely estimated multi-group comparison SEM, ethnic and racial minority FGCS and White FGCS differed in several ways. First, the relations between the indicator variables and the community organization factor were reexamined to determine the underlying construct

for each group. With ethnic and racial minority FGCS, community organization was linked with lower community SES level, increased residential stability, lower two-parent household prevalence, and greater ethnic and racial homogeneity. Given these findings, it is plausible that the community organization variable represented a particular type of community for ethnic and racial minority FGCS: a community that could be termed *at-risk* (Deleire & Kalil, 2002; McKenzie, Whitley, & Weich, 2002). Contrasting this pattern, higher community organization was associated with higher community SES level, decreased residential stability, more two-parent households, and greater ethnic and racial homogeneity for White FGCS. This pattern could be interpreted to reflect a more privileged group that possesses greater social capital in terms of SES, family structure, and the resources to move as they desire (McKenzie et al., 2002).

In the context of these opposing constructs of community organization, the hypotheses were again tested separately for ethnic and racial FGCS and White FGCS. Hypothesis 1 was partially supported for ethnic and racial minority FGCS. Community organization was positively and directly related to self-efficacy, as expected. However, community organization was not related to college student adjustment and negatively and directly related to life satisfaction. Considering that ethnic and racial minority FGCS view higher education as a means to improve their lives (Lopez, 2001), it is possible that their development of high self-efficacy is related to their desire to succeed. Relatedly, Phinney and Haas (2003) found that ethnic and racial minority FGCS who were more equipped to cope with stressful life events possessed higher levels of self-efficacy. This finding suggests that ethnic and racial minority FGCS who live in more stressful or at-risk community environments may possess higher self-efficacy because they have employed effective coping mechanisms to thrive in spite of their circumstances. Therefore, self-efficacy may distinguish ethnic and racial minority FGCS from

peers who do not pursue higher education and could partially explain their decision to become the first in their families to attend college.

The nonsignificant relation between community organization and college adjustment could be explained by Hurtado et al.'s (1996) finding that in-college experiences (e.g., participating in FGCS support programs) are more predictive of adjustment than personal background variables for ethnic and racial minority students. The negative relation between community organization and life satisfaction for this group may result from the challenges of living in an at-risk community and lend credence to prior studies which have found a negative relationship between such an environment and life satisfaction (Bradley & Corwyn, 2004; Duncan et al., 1994). For White FGCS, on the other hand, no significant direct links were found between community organization and self-efficacy, college adjustment, or life satisfaction. These nonsignificant relations may be due to other variables being better predictors of these outcomes for White FGCS. For instance, previous studies have linked parental support with higher self-efficacy (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001), community service engagement with college adjustment (Ting, 2003), and individual family SES with life satisfaction (Bradley & Corwyn, 2004) for predominantly White samples.

Hypothesis 2 states that higher self-efficacy is related to greater college adjustment and life satisfaction for both ethnic and racial minority FGCS and White FGCS. With both subsamples, self-efficacy was found to be negatively related to college adjustment and positively linked to life satisfaction. As mentioned previously, this unexpected pattern of lower college adjustment may be attributed to the use of a general self-efficacy measure as opposed to a more context-specific measure such as college self-efficacy (Pajares, 1997). It is also possible that the truncated range observed for the college adjustment scores for this sample did not provide

sufficient variability, therefore lower scores were still reflective of moderate college adjustment in this highly adjusted sample. A larger range of adjustment scores may be necessary to produce model results that are more consistent with the hypothesis. Lastly, the relationship between life satisfaction and self-efficacy was consistent with previous findings for ethnically and racially diverse samples (Bradley & Corwyn, 2004; Coffman & Gilligan, 2003).

Finally, with regard to the indirect relations proposed by Hypothesis 3, community organization was negatively related to college adjustment and positively linked to life satisfaction through self-efficacy for ethnic and racial minority FGCS. More specifically, higher community organization was related to greater self-efficacy, which resulted in lower college adjustment for this group. As mentioned earlier, ethnic and racial minority FGCS in at-risk communities may develop sufficient coping and higher self-efficacy which aids in their pursuit of attending college, yet adjusting once they enter college may be difficult in light of their limited financial resources, lack of preparation, and unfamiliarity with campus life (Hertel, 2002; Mehta et al., 2011). In support of the hypothesis, higher community organization was related to greater self-efficacy, which in turn was related to greater life satisfaction. This positive indirect effect from community organization to life satisfaction is supported in previous literature (e.g., Bandura, 1995; Diener et al., 1985). Self-efficacy did not mediate the relationship between community organization and the outcome variables for White FGCS, which aligns with the unsubstantiated relation of self-efficacy to some of the community organization indicators for White FGCS students (McMillan & Reed, 1994; Peng et al., 1992). Overall, the pattern of findings reported in the current study highlight the importance of examining within group similarities and differences for FGCS. The different results for ethnic and racial minority FGCS

and White FGCS would have been obscured if the total sample were the only focus of investigation.

### **Limitations**

A few limitations should be considered when interpreting the results of the current study. First, data was collected from FGCS attending 4-year institutions, so results may not be generalizable to FGCS attending 2-year community colleges or to non-FGCS. Relatedly, the current sample does not include students who dropout during their undergraduate matriculation and may not reflect the experiences of students facing the most significant challenges. The majority of the sample identified as female (76.9%), and the results may not adequately reflect male FGCS' experiences. According to certain criteria, the Cronbach's alpha value computed for the college adjustment variable (i.e., .62) could be considered less than ideal (Gliem & Gliem, 2003). However it does not meet guidelines for problematic levels and may be due to the truncated variability observed with this set of items; thus a sample with a wider variation of college adjustment levels could potentially increase internal consistency estimates (Gliem & Gliem, 2003; Helms, Henze, Sass, & Misfud, 2006). Another consideration is the cross-sectional design of this study. Though this design does not allow for causal inferences, it does provide preliminary data regarding relationships between various community variables and individual outcomes for FGCS. Examining these variables in a more complex model (e.g., SEM) is helpful for understanding how to improve the measurement of these variables in future research.

Community organization and the variables comprising this factor did not operate as we initially hypothesized. In fact, many of the anticipated relationships between community organization and its indicator variables (i.e., community SES, residential stability, two-parent household prevalence, ethnic and racial homogeneity) were nonsignificant or related in the

opposing direction. The inconsistent relationship between community SES level and community organization may have resulted from the use of a PCA factor score as a measure of community SES level. Given that items regarding the sale and use of drugs (Item 5) and groups of teenagers or adults hanging out in the neighborhood and causing trouble (Item 6) exhibited the highest factor loadings (i.e.,  $> .80$ ; Costello & Osborne, 2005), it is possible that the resultant factor score was more reflective of neighborhood disorder or safety as opposed to community SES level. Examining the model by ethnic and racial category provided a more nuanced understanding of these relationships and appeared to be more relevant for ethnic and racial minority FGCS. Social disorganization theory is widely applied to studies investigating ethnically and racially diverse residents in urban communities (Kingston et al., 2009; Sampson, 1997; Sampson & Groves, 1989; Shaw & McKay, 1942). Numerous social disorganization studies have aimed to describe at-risk communities and explain increasing crime rates in those areas (Adams, 1992). Thus, it is possible the indicators used to inform community organization in this study, which were based on social disorganization theory, were more reflective of and relevant to the experiences of individuals from at-risk communities. Future studies should consider indicators that better predict community organization for non-at risk communities.

Lastly, the measures used in this study relied on self-report data that may not represent more objective measurements of these constructs. For instance, participants' perceptions of their community SES level and physical community environment may have been biased by their own families' SES level. Expecting participants to know the approximate percentage of people in their community who own their homes and the prevalence of two-parent households in their community may have adversely influenced the accuracy of these results as well. However, the intention was to interpret these variables as each participant's perception of her or his

community; perceptions of individual experiences of environment are an important value of sociological research (Sampson & Groves, 1989). Community perceptions are particularly important because they help individuals discover meaning in their environments, which essentially influences their actions (Ingold, 1992). Based on these findings, measures to potentially modify in future research that is more interested in actual, versus perceived, data are: community organization, community SES level, and college student adjustment.

### **Implications and Future Directions**

In an effort to contribute to the historical focus on human strengths and positive life outcomes in counseling psychology (Lopez et al., 2006), the current study investigated factors contributing to the resiliency of FGCS. Though previous studies have examined barriers impeding FGCS success (e.g., Coffman, 2011; Hertel, 2002), it is also important to identify protective factors that promote success. In addition to investigating resiliency promoters for FGCS, future studies should also identify FGCS who dropout of college in order to compare which protective factors contribute to retention for each group (i.e., FGCS who complete college and FGCS who drop out before completion).

It was anticipated that FGCS from more organized communities would report higher self-efficacy, better college adjustment, and greater life satisfaction. Furthermore, it was hypothesized that self-efficacy would help explain variance in the positive relations between community organization and both college student adjustment and life satisfaction. The hypotheses that were supported in the current study highlight how ethnic and racial minority FGCS in at-risk communities are resilient and develop high levels of self-efficacy and life satisfaction despite their challenging community environments. Indeed, prior studies that have focused on negative outcomes and risk models (e.g., Hertel, 2002) may reflect erroneous

assumptions about ethnic and racial FGCS, overlooking important strengths and resiliencies that could be further studied, nourished, and celebrated. Consequently, future investigations should attend to more positive aspects of ethnic and racial FGCS experiences with intention.

Additionally, a measure of social capital on one's college campus (i.e., resources used to gain access to institutional capital and support; Perna & Titus, 2005) may provide a more holistic view of students' community background because it will encompass influencing variables from one's home environment and their current college environment. For example, an assessment of participants' engagement in community or university based FGCS programs may be helpful in identifying additional protective factors related to students' success (Peabody, Hutchens, Lewis, and Deffendall, 2011; Perna & Titus, 2005).

Results also suggest that self-efficacy has important implications for college adjustment and life satisfaction for both ethnic and racial minority FGCS and White FGCS. Considering the key role self-efficacy seems to play in the experiences of FGCS, study results can help inform families, communities, college administrators, student affairs professionals, and college counseling center personnel about the importance of facilitating the development of students' self-efficacy. Ways to increase self-efficacy could include involving students in pre-college activities that allow them to develop and demonstrate mastery of a particular area and promoting the importance of engaging in leadership opportunities that may instill a sense of accomplishment (DeWitz, Woosley, & Walsh, 2009; Dugan & Komives, 2007; Hodges, 2011). In a therapeutic context, students may benefit from exploring their level of self-efficacy in various aspects of their life (e.g., social, academic), having those experiences validated by the counselor, and helping them generalize their sense of efficacy to task-specific contexts (Cervone, 2000; Schunk & Meece, 2005).

Importantly, it was found that the pattern of findings was modified when the hypothesized model was investigated by subgroup and points to the value of multi-group comparisons in enhancing our understanding of the concepts studied. These analyses not only highlight important distinctions by subgroup, but also identified common experiences for FGCS that acknowledge their status as a cultural group (e.g., Coffman, 2011; Hertel, 2002). Study results indicate that both ethnic and racial minority and White FGCS perceived their home communities as comprised of people sharing similar ethnic and racial backgrounds. Further, a majority of the sample reported attending ethnically and racially diverse universities. These students' experiences of diversity may differ, but both groups are entering college environments with a different demographic makeup from their home environments. Both groups also associated higher levels of self-efficacy with increased life satisfaction. Thus, providing information on multiple factors that comprise the development and experiences of FGCS (e.g., community environment, self-efficacy) will ideally educate college administrators on how to develop FGCS programs that accommodate the intersecting (e.g., race, first generation status) and shared identities of such students (Coffman, 2011). College- and university-based programs such as Student Support Services, Education Opportunity Centers, and Upward Bound integrate students from various ethnic and racial backgrounds and have an opportunity to challenge perceptions students acquire in their ethnically and racially homogenous home communities. Creating programs that enhance cultural competence, promote leadership development, and prepare students to work in a diverse global economy can potentially increase students' self-efficacy, life satisfaction, and overall college experience.

In sum, there is much to be learned about FGCS and how their individual community backgrounds influence their college experience. It is recommended that future studies assess

other indicators of community SES level to include in a PCA, such as access to community resources, employment rates, types of careers held by community members, and family SES level. Assessing other variables that may be related to FGCS outcomes and additional indicators of success such as attendance and retention should also be considered. For example, Perna and Titus (2005) found that parental involvement in terms of discussing college with children and initiating contact with the child's school were related to college attendance. Peabody et al. (2011) have also identified parent programs that involve and educate FGCS parents about their child's college experience is also a promising retention practice. Additionally, multi-group analyses should be utilized to examine within-group variability by ethnicity, race, and other important identity variables (e.g., gender). The current study highlights the value of conducting research that integrates sociocultural factors, mental health outcomes, and ethnic and racial similarities, and provides a snapshot of potentially pertinent differences to consider with regard to FGCS' self-efficacy, college adjustment, and overall life satisfaction.

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Table 1

*Principal component analysis (PCA) results*

Community SES Indicator	Component 1
How much of a problem is people selling or using drugs?	.849
How much of a problem are groups of teenagers or adults hanging out in the neighborhood and causing trouble?	.847
How much of a problem is litter, broken glass, or trash on sidewalks and streets?	.827
How much of a problem is graffiti on buildings and walls?	.784
How much of a problem is drinking in public?	.783
How much of a problem are vacant or deserted houses or storefronts?	.767
How would you describe the neighborhood you were raised:	.273

Table 2

*Correlation matrix and descriptive statistics for variables in the structural equation model by group*

Measure	1	2	3	4	5	6	7
Total Sample ( $n = 344$ )							
1. Community SES							
2. Residential Mobility	-.12*						
3. Single-Parent Household	.18**	-.20***					
4. Ethnic & Racial Heterogeneity	.05	-.12*	-.04				
5. Self-efficacy	-.04	.03	-.09	.06			
6. College Adjustment	-.18**	-.03	-.02	-.02	-.23***		
7. Life Satisfaction	.09	-.14**	.07	.09	.43***	-.16**	
<i>M</i>	.00	4.96	3.45	3.63	4.29	82.57	23.72
<i>SD</i>	1.00	2.13	1.12	1.36	.54	11.85	6.26

*Note.* \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Table 3

*Standardized Regression Weights for the Hypothesized Freely Estimated and Alternative models*

Path	Total Sample- Hypothesized Model	Total Sample- Alternative Model	Ethnic and Racial Minority FGCS- Hypothesized Model ( <i>n</i> = 183)	White FGCS- Hypothesized Model ( <i>n</i> = 161)
CO → CS	.41***	.41	-.44***	.25*
CO→RM	-.40***	-.40	.38***	-.57*
CO→SPH	.42***	.42	-.58***	.26*
CO → ERH	.11	.11	.28**	.72*
CO → SE	-.12	-.12	.40***	.15
CO → CA	-.18*	-.18	.20	.07
CO → LS	.31***	.32	-.23*	.16
SE → CA	-.25***	-.25***	-.25**	-.32*
SE → LS	.46***	.46***	.38***	.55*

*Note.* CO = Community Organization; CS= Community SES; RM = Residential Mobility; SPH= Single-parent household prevalence; ERH = Ethnic and Racial Heterogeneity; SE = Self-efficacy; CA= College Adjustment; LS = Life Satisfaction. \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ . Beta coefficients represent standardized values.

Table 4

*Participant Characteristics*

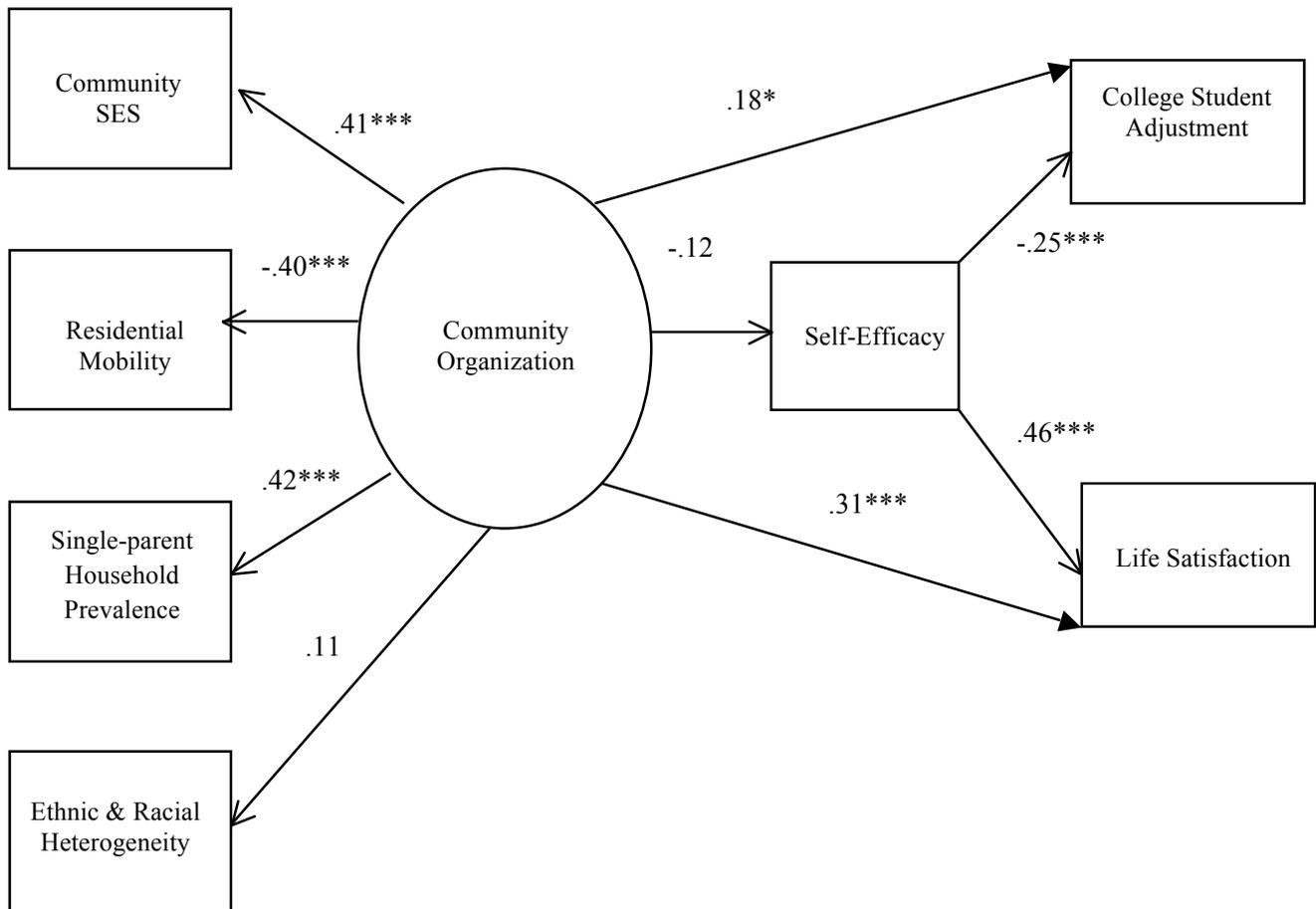
Characteristic	Descriptor	<i>n</i> , %, or <i>M</i>
Ethnicity & Race	African American	<i>n</i> = 42, 12.1%
	American Indian	<i>n</i> = 8, 2.3%
	Asian/Asian American/Pacific Islander	<i>n</i> = 22, 6.4%
	Caucasian	<i>n</i> = 161, 46.5%
	Hispanic/Latino(a)	<i>n</i> = 89, 25.7%
	Multiracial	<i>n</i> = 22, 6.4%
Age	18-60	<i>M</i> = 21
Gender	Female	<i>n</i> = 266, 76.9%
	Male	<i>n</i> = 86, 23.1%
Social Class	Lower Working	<i>n</i> = 60, 17.3%
	Middle	<i>n</i> = 134, 38.7%
	Upper middle	<i>n</i> = 127, 36.7%
	Upper	<i>n</i> = 22, 6.4%
		<i>n</i> = 1, .3%
Classification	First-year	<i>n</i> = 100, 28%
	Second-year	<i>n</i> = 57, 16.5%
	Third-year	<i>n</i> = 83, 24%
	Fourth-year	<i>n</i> = 79, 22.8%

Table 5

*Measures of Interest*

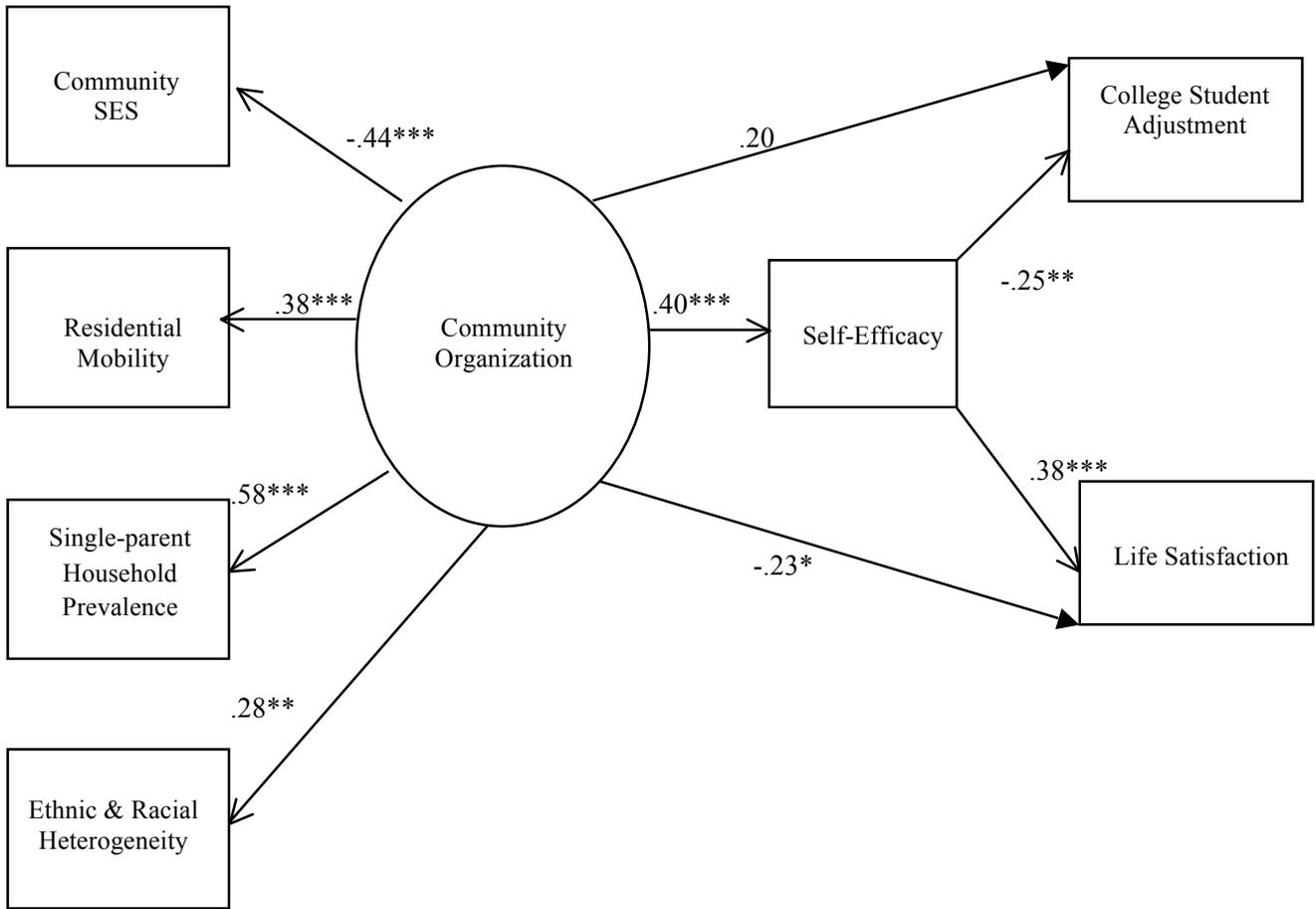
Measure	Number of items	Description	Cronbach's alpha
Demographic Questionnaire	26	Items regarding age, ethnicity, race, classification etc.	N/A
Community Organization	11	Items regarding community SES level, residential stability, two-parent households, ethnic and racial homogeneity, and neighborhood disorder	.90
General Self-efficacy Scale	8	Statements rated on a 5-point Likert scale	.91
College Adjustment Test (CAT)	19	Statements rated on a 7-point Likert scale	.62
Life Satisfaction	5	Statements rated on a 5-point Likert scale	.86

Figure 1. Total Sample Structural Equation Model



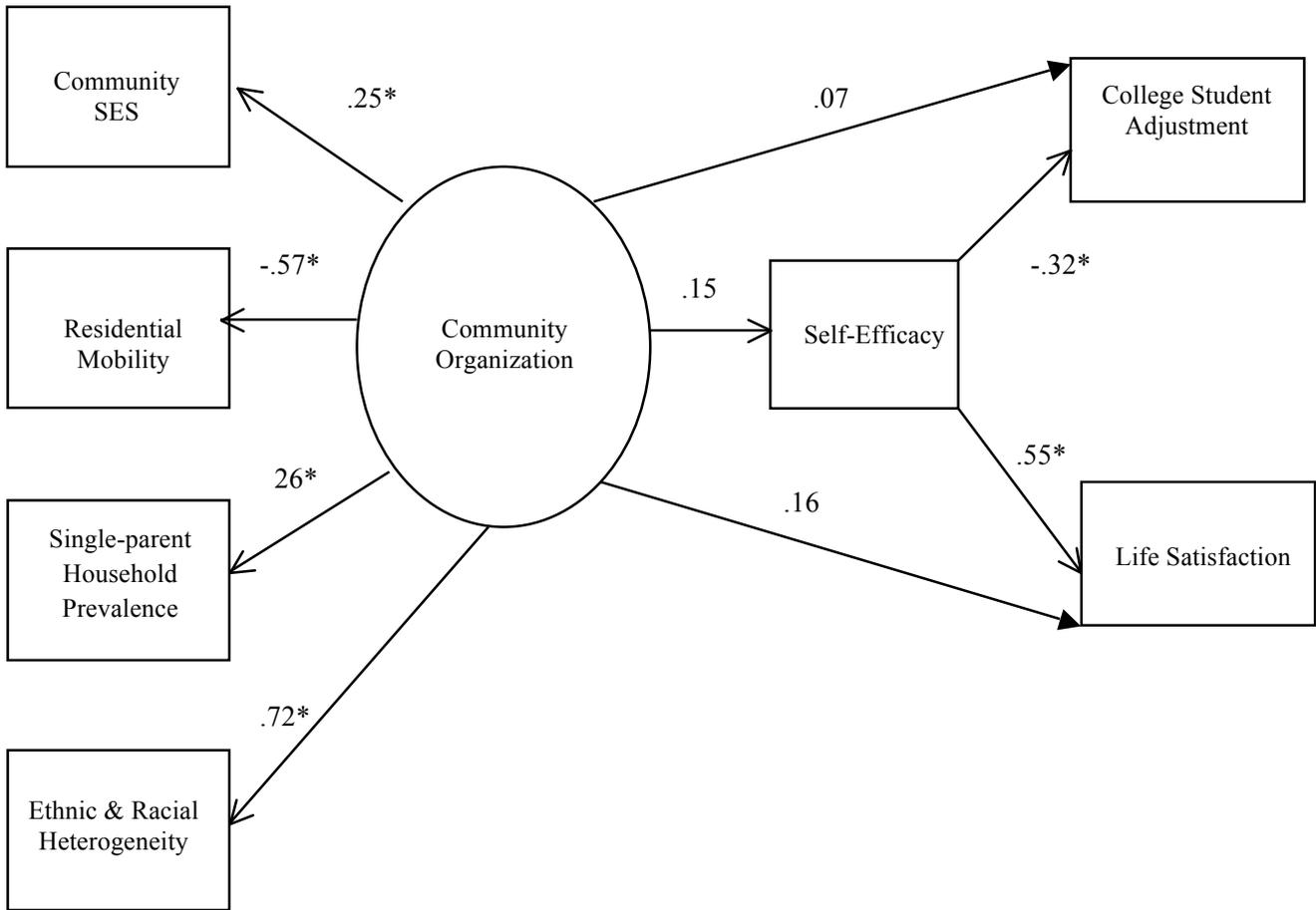
Note. \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ . Beta coefficients represent standardized values.

Figure 2. *Ethnic and racial minority Structural Equation Model*



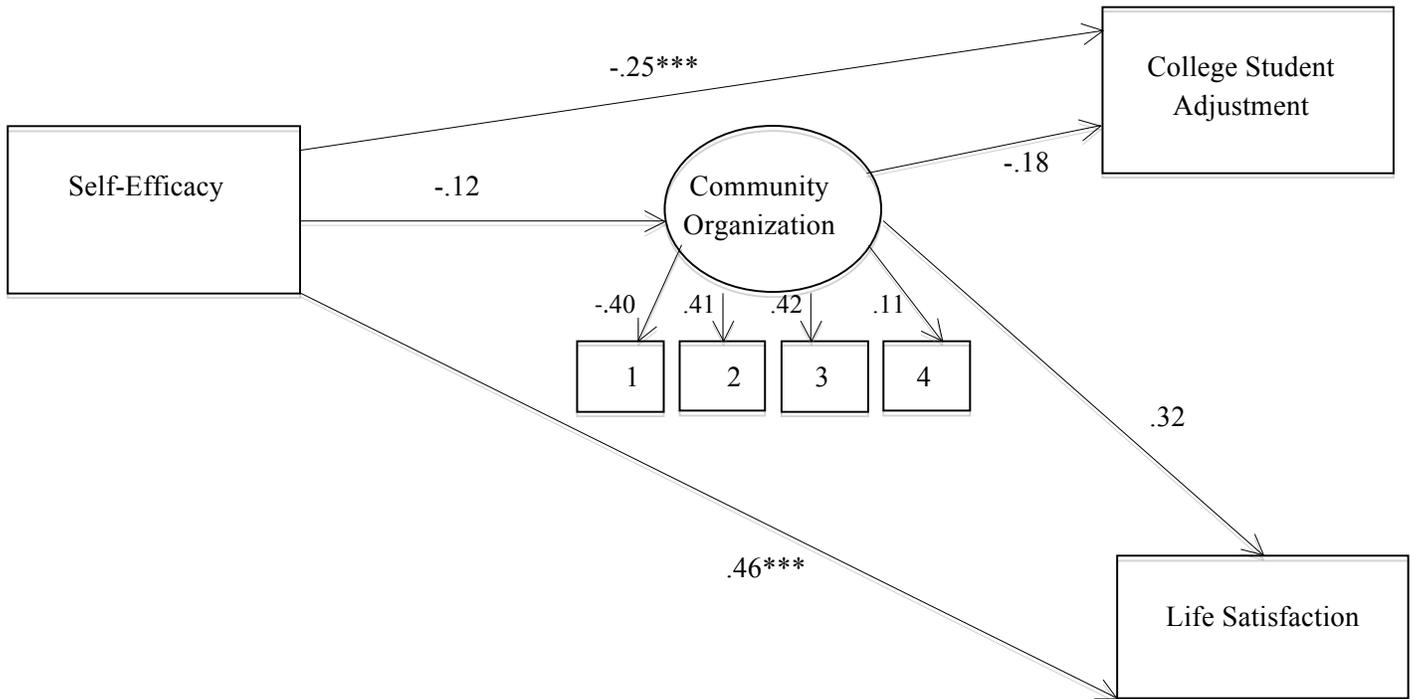
Note. \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ . Beta coefficients represent standardized values.

Figure 3. *White FGCS Structural Equation Model*



Note. \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ . Beta coefficients represent standardized values.

Figure 4. *Alternative Structural Equation Model*



*Note.* 1= SES, 2= Residential Mobility, 3= Single-parent Household Prevalence, 4= Ethnic and Racial Heterogeneity. \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ . Beta coefficients represent standardized values.

## Appendix

### Survey Materials

#### **Advertisement Email**

Hello! My name is Shalena Heard, and I am a doctoral candidate in the Counseling Psychology program at Lehigh University. I am conducting a dissertation study under the supervision of my advisor, Dr. Cirleen DeBlaere, on the background and experiences of first-generation college students (i.e. students who are the first in their family to attend college) and the factors influencing their adjustment and personal well-being. With this study, we hope to gain a better understanding of the communities these students come from and their beliefs in their ability to succeed in the college setting. Your participation is essential to achieving this goal, so we hope that you will take part in our study.

In order to participate, you must be at least 18 years old, identify as a first-generation college student (i.e. your parents/guardians did not complete college), and be currently enrolled at a four-year college/university.

If you would like to participate in my study, please click on the link below and you will be directed to the online survey:

**INSERT LINK**

Thank you VERY much in advance for your time! Please feel free to pass on this link to other people who might be eligible.

If you have any question about this study, please feel free to contact me at slh209@lehigh.edu. This research has been approved by the Lehigh University Institutional Review Board (IRB# **INSERT**).

Sincerely,

Shalena Heard, M.Ed.

Cirleen DeBlaere, Ph.D.

## Informed Consent

Dear Participant,

I am conducting a dissertation study under the supervision of my advisor, Dr. Cirleen DeBlaere, on the background and experiences of first-generation college students (i.e. students whose parents/guardians did not complete college) and the factors influencing their adjustment and personal well-being. With this study, we hope to gain a better understanding of the backgrounds of these students and their beliefs in their ability to succeed in the college setting. Participation in our study will involve completing a survey that will take approximately 20-30 minutes of your time. In order to participate, you must be at least 18 years old, and be currently enrolled at a four-year college/university. Your participation is entirely voluntarily and should you choose to discontinue participation, you are allowed to exit the survey at any time.

No data will identify you individually. Responses will be reported in the form of group averages that include data from the other participants; therefore all responses will be anonymous and confidential. If you do choose to participate, completion and submission of the online survey indicates your consent to the above conditions. You may choose to exit the survey at any time. There is no compensation or direct benefit to you for participating in this study. However, your participation will help us understand the experiences and backgrounds of first-generation college students and their adjustment to the college environment. If you have any questions or concerns about this study you may contact Shalena Heard (slh209@lehigh.edu) or Dr. Cirleen DeBlaere (deblaere@lehigh.edu).

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact Susan E. Disidore at (610)758-3020 (email: sus5@lehigh.edu) or Troy Boni at (610)758-2985 (email: tdb308@lehigh.edu) of Lehigh University's Office of Research and Sponsored Programs. All reports or correspondence will be kept confidential.

Thank you,

Shalena Heard, M.Ed.

Cirleen DeBlaere, Ph.D.

Lehigh University

**I have read the procedure described above and I understand that by clicking the "NEXT" button, I am voluntarily agreeing to participate in this study.**

### Neighborhood Disorder subscale

The following questions are based on a list of things that are problems in some neighborhoods. Please RATE how each impacts the quality of your neighborhood.

1. How much of a problem is litter, broken glass, or trash on sidewalks and streets?
  - a. A big problem
  - b. Somewhat a problem
  - c. Not a problem
  
2. How much of a problem is graffiti on buildings and walls?
  - a. A big problem
  - b. Somewhat a problem
  - c. Not a problem
  
3. How much of a problem are vacant or deserted houses or storefronts?
  - a. A big problem
  - b. Somewhat a problem
  - c. Not a problem
  
4. How much of a problem is drinking in public?
  - a. A big problem
  - b. Somewhat a problem
  - c. Not a problem
  
5. How much of a problem is people selling or using drugs?
  - a. A big problem
  - b. Somewhat a problem
  - c. Not a problem
  
6. How much of a problem are groups of teenagers or adults hanging out in the neighborhood and causing trouble?
  - a. A big problem
  - b. Somewhat a problem
  - c. Not a problem

## General Self-Efficacy Scale

Below are eight statements with which you may agree or disagree. Using the 1-5 scale below, indicate your agreement with each item by choosing the appropriate number on the line preceding that item.

Please be open and honest in your responding. The 5-point scale is as follows:

1 = Strongly agree

2 = Agree

3 = Neither agree or disagree

4 = Disagree

5 = Strongly disagree

1. I will be able to achieve most of the goals that I have set for myself.
  - a. Strongly agree
  - b. Agree
  - c. Neither agree or disagree
  - d. Disagree
  - e. Strongly disagree
  
2. When facing difficult tasks, I am certain that I will accomplish them.
  - a. Strongly agree
  - b. Agree
  - c. Neither agree or disagree
  - d. Disagree
  - e. Strongly disagree
  
3. In general, I think that I can obtain outcomes that are important to me.
  - a. Strongly disagree
  - b. Disagree
  - c. Neither agree or disagree
  - d. Agree
  - e. Strongly agree
  
4. I believe I can succeed at most any endeavor to which I set my mind.
  - a. Strongly disagree
  - b. Disagree

- c. Neither agree or disagree
  - d. Agree
  - e. Strongly agree
5. I will be able to successfully overcome many challenges.
- a. Strongly disagree
  - b. Disagree
  - c. Neither agree or disagree
  - d. Agree
  - e. Strongly agree
6. I am confident that I can perform effectively on many different tasks.
- a. Strongly disagree
  - b. Disagree
  - c. Neither agree or disagree
  - d. Agree
  - e. Strongly agree
7. Compared to other people, I can do most tasks very well.
- a. Strongly disagree
  - b. Disagree
  - c. Neither agree or disagree
  - d. Agree
  - e. Strongly agree
8. Even when things are tough, I can perform quite well.
- a. Strongly disagree
  - b. Disagree
  - c. Neither agree or disagree
  - d. Agree
  - e. Strongly agree

## College Adjustment Test (CAT)

Use a 7-point scale to answer each of the following questions, where:

1                      2                      3    4                      5    6                      7  
Not at all                      Somewhat                      A great deal

Within the LAST WEEK, to what degree have you:

1. Missed your friends from high school \_\_\_\_\_
2. Missed your home \_\_\_\_\_
3. Missed your parents and other family members \_\_\_\_\_
4. Worried about how you will perform academically at college \_\_\_\_\_
5. Worried about love or intimate relationships with others \_\_\_\_\_
6. Worried about the way you look \_\_\_\_\_
7. Worried about the impression you make on others \_\_\_\_\_
8. Worried about being in college in general \_\_\_\_\_
9. Liked your classes \_\_\_\_\_
10. Liked your roommate(s) \_\_\_\_\_
11. Liked being away from your parents \_\_\_\_\_
12. Liked your social life \_\_\_\_\_
13. Liked college in general \_\_\_\_\_
14. Felt angry \_\_\_\_\_
15. Felt lonely \_\_\_\_\_
16. Felt anxious or nervous \_\_\_\_\_
17. Felt depressed \_\_\_\_\_
18. Felt optimistic about your future at college \_\_\_\_\_
19. Felt good about yourself \_\_\_\_\_

### Satisfaction with Life Scale

Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by choosing the appropriate number on the line following that item.

Please be open and honest in your responding. The 7-point scale is as follows:

1 = Strongly disagree

2 = Disagree

3 = Slightly disagree

4 = Neither agree or disagree

5 = Slightly agree

6 = Agree

7 = Strongly agree

\_\_\_ 1. In most ways my life is close to my ideal.

\_\_\_ 2. The conditions of my life are excellent.

\_\_\_ 3. I am satisfied with my life.

\_\_\_ 4. So far I have gotten the important things I want in life.

\_\_\_ 5. If I could live my life over, I would change almost nothing.

## Demographic Questionnaire

Please tell us a little about yourself. We will use this information only to describe the sample as a group.

1. Age \_\_\_\_\_
2. Gender
  - a. Woman
  - b. Man
  - c. Transwoman
  - d. Transman
  - e. Not listed (please specify):
3. Were you born in the United States?
  - a. Yes
  - b. No
  - c. If no, please specify where:
4. What is your primary language? \_\_\_\_\_
5. Ethnicity/race:
  - a. African/African American/Black
  - b. American Indian/Native American
  - c. Asian/Asian American/Pacific Islander
  - d. Caucasian/White
  - e. Hispanic/Latina(o)
  - f. Multiracial
  - g. Not listed (please specify):
6. People from my neighborhood are ethnically/racially like me:
  - a. Predominantly unlike me (less than 25%)
  - b. Mostly unlike me (25%-50%)
  - c. Half like me (50%)
  - d. Mostly like me (50%-75%)
  - e. Predominantly like me (75%-100%)
7. Sexual orientation:
  - a. Exclusively Lesbian/Gay
  - b. Mostly Lesbian/Gay
  - c. Bisexual
  - d. Mostly Heterosexual
  - e. Exclusively Heterosexual
  - f. Asexual
  - g. Not listed (please specify):

8. Religious affiliation:
  - a. Buddhist
  - b. Christian
  - c. Hindu
  - d. Jewish
  - e. Muslim
  - f. Agnostic
  - g. Atheist
  - h. Spiritual but not religious
  - i. I do not affiliate myself with a religion
  - j. Not listed (please specify):
  
9. How often do you practice your religion or spiritual beliefs?
  - a. Extremely often
  - b. Very often
  - c. Moderately often
  - d. Slightly often
  - e. Not at all often
  - f. Not applicable
  
10. Your current social class:
  - a. Lower class
  - b. Working class
  - c. Middle class
  - d. Upper middle class
  - e. Upper class
  
11. How would you describe the neighborhood where you were raised:
  - a. Lower class
  - b. Working class
  - c. Middle class
  - d. Upper middle class
  - e. Upper class
  
12. To the best of your knowledge, how many residents in your neighborhood have lived there for five years or more?
  - a. Almost all residents (75%-100%)
  - b. Most residents (50%-75%)
  - c. Half of the residents (50%)
  - d. Few residents (25%-50%)
  - e. Very few residents (less than 25%)

13. To the best of your knowledge, how many residents in your neighborhood own their homes?
- Almost all residents (75%-100%)
  - Most residents (50%-75%)
  - Half of the residents (50%)
  - Few residents (25%-50%)
  - Very few residents (less than 25%)
14. To the best of your knowledge, how many households in your neighborhood are headed by one parent or guardian?
- Almost all families (75%-100%)
  - Most families (50%-75%)
  - Half of the families (50%)
  - Few families (25%-50%)
  - Very few families (less than 25%)
15. Are the single-parent households in your neighborhood predominantly:
- Father-only
  - Mother-only
  - Father-extended (i.e., father is the only parent in the home but the mother assists)
  - Mother-extended (i.e., mother is the only parent in the home but the father assists)
16. What is the highest level of school your father/guardian completed or the highest degree he received?
- Less than high school degree
  - High school degree or equivalent (e.g., GED)
  - Some college but no degree
  - Associate degree
  - Bachelor degree
  - Graduate degree
  - Not listed (please specify):
17. What is the highest level of school your mother/guardian completed or the highest degree she received?
- Less than high school degree
  - High school degree or equivalent (e.g., GED)
  - Some college but no degree
  - Associate degree
  - Bachelor degree
  - Graduate degree
  - Not listed (please specify):

18. Are you an international student?
- Yes
  - No
19. Type of institution you attend:
- Four year public college or university
  - Four year private college or university
20. Is your college/university considered a:
- Historically Black College or University (HBCU)
  - Predominantly White Institution (PWI)
  - Considerably diverse college or university (i.e., students of various ethnic and racial backgrounds are almost equally represented)
  - Not listed (please specify):
21. In what region of the United States is your college/university located:
- Northeast
  - Southeast
  - Northwest
  - West
  - Midwest
  - Southwest
  - Not located in the United States, please specify:
22. Class status:
- First-year undergraduate student
  - Second-year undergraduate student
  - Third-year undergraduate student
  - Fourth-year undergraduate student
  - Graduate or professional student
  - Not listed, please specify:
23. What is your academic major? \_\_\_\_\_
24. What is your academic minor? \_\_\_\_\_
25. How do you pay for your college education? (Choose all that apply)
- Scholarship(s)
  - Grant(s)
  - Loan(s)
  - Parent(s)
  - Self
  - Not listed (please specify):

26. How often do you participate in extra-curricular activities at your college/university?
- Extremely often
  - Very often
  - Moderately often
  - Slightly often
  - Not at all often
27. Are you employed?
- Yes, full-time
  - Yes, part-time
  - No
28. How knowledgeable are you about campus support services for first-generation college students?
- Extremely knowledgeable
  - Very knowledgeable
  - Moderately knowledgeable
  - Slightly knowledgeable
  - Not at all knowledgeable
29. Where do you reside?
- On-campus
  - Off-campus with family
  - Off-campus with friends
  - Off-campus alone
  - Not listed (please specify):

## **Debriefing Statement**

Thank you for participating in our research. The goal of this study is to learn more about the multicultural backgrounds, experiences, and beliefs of students who are potentially the first in their immediate family to complete college (i.e., first-generation college students). As of 2010, the National Center for Education Statistics (NCES) reported that first-generation college students composed almost 50% of the population within higher education. Therefore it is important to understand what factors contribute to the success of this unique population of college students. If this survey has caused you any distress, you are encouraged to contact a counseling services or student affairs professional at your home institution.

We urge you not to reveal the purpose this study to others because if they choose to participate, then their responses might be biased and would invalidate the study. However, feel free to encourage other first-generation college students to participate.

As a reminder, you may contact Shalena Heard, M.Ed. at [slh209@lehigh.edu](mailto:slh209@lehigh.edu) or Cirleen DeBlaere, Ph.D. at [deblaere@lehigh.edu](mailto:deblaere@lehigh.edu) or at (610) 758-3255 with additional questions or concerns about this study. You may also report problems that may result from participation or direct questions in regard to your rights as a subject in this study to the Office of Research and Sponsored Programs, Lehigh University, (610) 758-3021. All reports or correspondence will be kept confidential.

Again, we greatly appreciate your participation.

VITA  
Shalena Heard, M.Ed.  
267-237-8499  
[slh209@lehigh.edu](mailto:slh209@lehigh.edu)

<b>EDUCATION</b>
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Lehigh University, Bethlehem, PA APA Accredited Training Program Doctor of Philosophy, Ph.D. Program of Study: Counseling Psychology	2009-2014
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*Dissertation:* The Relationship of Community Factors and Self-Efficacy with Adjustment and Well-being of First-Generation College Students  
*Defended:* July 2013

Howard University, Washington, DC Master of Education, M.Ed. Program of Study: Counseling Psychology	2007-2009
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Spelman College, Atlanta, GA Bachelor of Arts, B.A. Major: Psychology Minor: Sociology	2003-2007
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<b>HONORS AND AWARDS</b>
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Lehigh Office of Multicultural Affairs Graduate Student Award	2013
Lehigh College of Education Diversity Committee Special Recognition	2013
Lehigh Strive for Excellence Graduate Student Award	2012
Lehigh Graduate Student Leadership Award	2011
Lehigh "Making WAVES toward gender equity" Graduate Student Award	2011
Bill and Melinda Gates Millennium Scholar	2003-2009
Howard University Graduate Student Honors: Cumulative 4.0 GPA	2009

## CLINICAL EXPERIENCE

### **The Help Group**

**Sherman Oaks, CA**

*Doctoral Psychology Intern*

*August 2013-August 2014*

- APA Accredited Training Program
- School-based therapist for high school students diagnosed with emotional and behavioral disorders, autism spectrum disorders, learning disabilities, and trauma histories
- After-school day treatment program therapist for clients ages 5-11 years old diagnosed with emotional and behavioral disorders and trauma histories
- Administer, score, and interpret psychological assessments to establish clinical diagnosis, kindergarten readiness, and academic accommodations
- Facilitate family psychotherapy and psychoeducational child and parent groups
- Participate in interdisciplinary treatment team meetings and consultations
- Utilize LAUSD and DMH Welligent Electronic Health Records Software

### **Lehigh University's Center for Adolescent Research in Schools (CARS)**

**Bethlehem, PA**

*Mental Health Facilitator*

*July 2012-June 2013*

- Assisted school mental health professionals with implementing school-based cognitive behavioral interventions for students diagnosed with emotional and behavioral challenges
- Provided consultation and training to secondary school mental health professionals
- Assisted secondary school professionals with diagnostic assessments to identify student mental health needs and intervention planning procedures
- Administered objective behavioral assessments and academic achievement assessments to monitor student outcomes before and after intervention

### **KidsPeace Orchard Hills Campus- Diagnostic Program**

**Orefield, PA**

*Diagnostic Assessment Trainee*

*May 2012- August 2012*

- Administered intellectual, personality, psychosexual, and behavioral assessments to adolescents ages 11-17
- Developed integrated assessment reports that included assessment findings, diagnostic impressions, and treatment recommendations
- Consulted with site psychologists, clinical managers, psychiatrists, and residential unit staff to collect client data and inform assessment report
- Participated in interdisciplinary treatment team meetings and reported clinical interpretations to clients, families, and treatment team members

### **KidsPeace Orchard Hills Campus- Intensive Residential Treatment Program**

**Orefield, PA**

*Counseling Trainee*

*September 2011- May 2012*

- Provided individual counseling to clients in the residential and hospital facilities
- Co-facilitated weekly therapy and psychoeducational groups
- Developed a female Sexual Abuse Survivor group curriculum for ages 10-12
- Developed a male Social Skills group curriculum for ages 14-18

- Participated in monthly interdisciplinary treatment team meetings for individual clients
- Monitored and structured treatment based on specified goals and proposed discharge dates
- Administered intellectual assessments, psychosexual evaluations, and psychological evaluations by request

**Counseling Psychology Clinical Supervision Apprenticeship**

**Bethlehem, PA**

*Doctoral Student Supervisor*

*September 2011-May 2012*

- Provided clinical supervision to four master's level counseling trainees
- Assisted trainees working in college counseling centers and American international schools in Korea and Kuwait
- Listened to supervisees' audio recorded therapy sessions and provided verbal feedback weekly and transcribed feedback bi-monthly
- Consulted with trainees about their personal and professional identity development
- Engaged trainees in multicultural training opportunities on and off site

**Lafayette College Counseling Center**

**Easton, PA**

*Counseling Trainee*

*August 2009-May 2010*

- Provided counseling services to a range of Lafayette College students under the supervision of doctoral staff psychologists
- Caseload management: compiling progress notes, treatment planning, and psychiatry referral as needed
- Conducted alcohol and drug abuse evaluations with training from the Coordinator of Drug and Alcohol Services
- Administered personality assessments by request
- Facilitated consultation services and crisis intervention as needed
- Utilized Titanium clinical system

**Maya Angelou Public Charter School**

**Washington, DC**

*Counseling Intern*

*February 2009- May 2009*

- Provided individual and group counseling services to students in grades 9-12 under the supervision of a licensed professional counselor
- Caseload management included: compiling progress notes, treatment planning and peer mediation as warranted
- Engaged in consultation regarding the social-emotional and academic wellbeing of students on campus

**Progressive Life Center**

**Prince George's County, MD**

*Family Preservation Intern*

*January 2009- May 2009*

- Provided individual and family intervention services to clients referred by Prince George county's Department of Social Services, Department of Juvenile Justice, Public School System, or local mental health agencies
- Provided home-based support and counseling for referred individuals and families
- Assisted clients with identifying community resources, transported clients, and fulfilled other duties identified on the service plan

**Covenant House Washington (CHW)**

**Washington, DC**

*Prevention Services Trainee*

*September 2008- January 2009*

- Co-facilitated psycho-education and college preparation groups for adolescents ages 11-19 under the supervision of a licensed mental health professional
- Organized and co-facilitated parenting workshops
- Conducted intake interviews and developed individual service plans for adolescent clients
- Assisted Family Service Coordinator with program development, community outreach, and recruitment
- Supervised student interns

## CONSULTATION EXPERIENCE

- **Heard, S.** (2012, October). *Rational Emotive Behavior Therapy (REBT)*. Training workshop facilitated at Step By Step Inc. Substance Abuse Clinic, Allentown, PA.
- **Heard, S. & McClaind, L.** (2012, August). *Supporting Your First-Generation College Student*. First-year orientation workshop co-facilitated at Lehigh University, Bethlehem, PA.
- **Heard, S.** (2012, February). *Navigating the Supervision Process*. Training workshop facilitated at Step By Step Inc. Substance Abuse Clinic, Allentown, PA.
- **Heard, S.** (2011, November). *Intersecting Identities*. Psychoeducational workshop co-facilitated at the Lehigh Valley LGBTQIA Intercollegiate Retreat, Bethlehem, PA.
- **Heard, S.** (2011, July). *Applying to Graduate School*. Psychoeducational workshop facilitated at Step By Step, Inc. Substance Abuse Clinic, Allentown, PA.
- **Heard, S., & Austin, A.** (2010, October). *The Haves and The Have Nots: A Discussion of Class and Social Stratification*. Workshop seminar co-facilitated at Lehigh University's Office of Student Leadership and Development Power and Privilege Series, Bethlehem, PA.
- **Heard, S. & Soheilian, S.** (2009, December). *Women, Leadership, and Empowerment at Lehigh University*. Discussion co-facilitated at Lehigh University's Office of Multicultural Affairs and Women's Center, Bethlehem, PA.
- **Gardner, T., Heard, S., Austin, A., & Vella, M.** (2009, November). *Multiculturalism, Diverse Classrooms, and Safe Spaces*. Discussion co-facilitated at Lehigh University's Middle and Secondary Social Studies Education course, Bethlehem, PA.
- **Heard, S.** (2008, December). *Applying the Client/Person Centered Approach in a Community Setting: Implications for practice in Prevention Services*. Workshop co-facilitated at Covenant House Washington (CHW), Washington, DC.

## PUBLICATIONS

- Liang, C., Molenaar, C., & Heard, S. (in press). Race, masculinity, and gendered racism: President Obama's influence on Black men. In Lori A. Barker (Ed.), *Obama on Our Minds: The Impact of Obama on the Psyche of America*. New York: Oxford University Press.

- Heard, S. (2013). Understanding First-generation College Students: Implications for Practice. *Psychotherapy Bulletin*, 48(3), 43-46.

## PROFESSIONAL PRESENTATIONS

- **Heard, S. & Bertsch, K.** (2012, March). *Finding mentors: A way towards self-care for all graduate students.* Structured discussion co-facilitated at the Association for Women in Psychology (AWP) National Conference, Palm Springs, CA.
- **Inman, A., Devdas, L., Heard, S., & Presseau, C.** (2011, August). *Curriculum, Practicum, and Supervision: Salient Features of Multicultural Training.* Roundtable discussion co-facilitated at the American Psychological Association (APA) Annual Convention, Washington, DC.
- **Presseau, C., & Heard, S.** (2010, October). *Means of Interpersonal Functioning in Supervision: Improving Preparedness for Critical Events.* Workshop co-facilitated at the Boston College Diversity Challenge, Boston, MA.
- **Austin, A., Heard, S., Kegel, K., & Presseau, C.** (2010, February). *Incorporating Social Justice into Graduate Curricula: Conversations about Who, What, Why, and How.* Roundtable co-facilitated at the Annual Winter Roundtable Conference, New York, NY.
- **Spokane, A., Austin, A., Cruza-Guet, M.C., Heard, S.** (2010, February). *Health Disparities: Opportunities for Counseling Psychologists for Funding, Research, and Intervention.* Symposia co-presented at the Annual Winter Roundtable Conference, New York, NY.

## RESEARCH EXPERIENCE

### **First-Generation College Student Community Study**

**Lehigh University, Bethlehem, PA**

*Dissertation Research*

*January 2012- Present*

- Developed and designed dissertation research proposal entitled "The Relationship of Community Factors and Self-Efficacy with Adjustment and Well-being of First-Generation College Students"
- Dissertation defended and approved 7/9/2013
- Currently undergoing preparation for publication
- Utilized SPSS Amos
- Utilized Statistical Package for the Social Sciences (SPSS)

### **Study Abroad Assessment Team**

**Lehigh University, Bethlehem, PA**

*Research Assistant*

*December 2009- December 2011*

- Assisted with designing and refining data collection materials for the study abroad assessment project
- Assisted with the development of a commercial measure to assess the impact of short-term study abroad experiences
- Developed and maintained qualitative data collection protocols

- Designed and conducted a descriptive study of students enrolled in Lehigh University's Global Citizenship certificate program
- Conducted a qualitative study entitled "Assessing short-term study abroad outcomes: A reflective analysis"
- Utilized Statistical Package for the Social Sciences (SPSS)

**Discovery Oriented Research Team**

**Lehigh University, Bethlehem, PA**

*Research Assistant*

*December 2009-March 2010*

- Received discovery oriented qualitative analysis training
- Analyzed interview transcriptions for a master's level thesis project
- Worked with a team to develop themes and categories for a qualitative data set

**Friends of the Children- National Office**

**Philadelphia, PA**

*Summer Research Intern*

*June 2009- August 2009*

- Assisted the National Executive Director with grant proposal procurement
- Researched, compared, and analyzed the structure of similar programs and organizations
- Assisted the National Executive Director and National Deputy Director with meeting, and conference preparation
- Compiled national and local statistics that quantified the organizations focus and goals

**Excellence & Motivation in Education Research Group (EMERG)**

**Washington, DC**

*Research Assistant*

*March 2008- May 2009*

- Assisted with the development and dissemination of the Howard University Engineering and Science Success Survey, HUE(S)<sup>3</sup>
- Provided technical, material, and administrative support necessary to execute the project
- Developed and maintained qualitative data collection protocols for the BEST project
- Designed engagement materials for the project such as flyers, recruitment scripts, and a website
- Served as a focus group facilitator
- Conducted quantitative and qualitative data processing, which included coding, cleaning, and transcribing
- Utilized Mac Pages and iWeb programs

## PROFESSIONAL EXPERIENCE

### **Lehigh University's College of Education Teaching Assistant**

**Bethlehem, PA**

*Counseling Youth in School and Clinical Settings*

*May 2012-June 2012*

- Co-developed course syllabus, and grading procedures
- Facilitated class activities and discussions
- Evaluated student's daily journal reflections and provided feedback
- Managed course materials on Coursesite and responded to student inquiries as needed

*Counseling Issues and Skills: Building Healthy Communities Teaching Assistant*

*July 2011*

- Assisted with syllabus development and grading rubric
- Supervised counseling role plays
- Presented a lecture on multicultural consultation in schools
- Presented a workshop on conducting group career counseling sessions in schools
- Assisted with grading final group project and role play presentations

*Diversity & Multicultural Perspectives*

*August 2010-December 2010*

- Co-facilitated class discussions based on assigned multicultural readings
- Maintained online course discussion board and resources (i.e., readings, exams)
- Assisted with the development of student evaluation rubric
- Explained course requirements and provided additional assistance to students as needed
- Assisted with final examination grading

### **Multicultural Resource Center (MRC)**

**Lehigh University, Bethlehem, PA**

*Graduate Assistant*

*August 2009-May 2012*

- Assisted the College of Education Diversity Committee with developing and executing programs that promoted multiculturalism, diversity, and equity throughout Lehigh's campus
- Worked with college faculty, staff, and students to identify and facilitate the acquisition of research, curriculum, and other materials related to multiculturalism, diversity, and equity
- Developed and maintained relationships with university-based and community-wide offices and agencies
- Disseminated information throughout the College of Education community about related events and resources through a monthly newsletter and the center's webpage
- Co-created grant evaluation rubric and reviewed grant applications annually
- Managed a \$25,000 budget
- Managed webpage using Dreamweaver software

### **Lehigh University Conference Services**

**Bethlehem, PA**

*Reservation Assistant*

*May 2011-August 2011 & May 2010-August 2010*

- Coordinated check-in and check-out of guests
- Staffed the conference center desk and remote registration locations
- Conducted key inventory
- Prepared registration packets and performed other related conference duties
- Managed guests details in Conference Programmer system

**Howard University's Learning Academy****Washington, DC***Passport to Work Summer Program: Group Facilitator**Summer 2008*

- Co-facilitated employability skills training for twenty 14-15 year old students
- Monitored the progress and productivity of each student on their respective job site at Howard University
- Served as a liaison between the students, their job site supervisor, and the program's administration regarding payroll and other relevant matters

**Afro American Counseling and Psychotherapy Institute****Silver Spring, MD***Administrative Assistant**September 2007 - October 2007*

- Greeted clients and administered intake forms
- Contacted clients daily to confirm appointments and scheduled new client appointments
- Photocopied necessary office forms and faxed pertinent documents at request
- Answered telephones and recorded all messages

**TRAININGS AND CERTIFICATIONS**

Autism Toolkit- <i>Certification</i>	2013
Child Abuse Awareness Training- <i>Certification</i>	2013-2014
Positive Discipline Parent Educator- <i>Certification</i>	2012
Trauma Focused CBT (TFCBT) - <i>Certification</i>	2011
Rational Emotive Behavior Therapy- <i>Training</i>	2011
The Sanctuary Model- <i>Training</i>	2011
Safe Zone- <i>Training</i>	2009

**PUBLIC SERVICE**

Frankford High School, Philadelphia, PA- <i>Career &amp; College Exploration Day annual speaker</i>	2010- Present
Lehigh University College of Education Graduate Leadership & Service Award- <i>Committee member</i>	2013
Lehigh University Circle of Sisters- <i>Co-facilitator</i>	2010-2012
Percy Hughes Award Committee- <i>Graduate student representative</i>	2010-2013
Courageous Conversations Training- <i>Facilitator</i>	2011-2012
Association for Women in Psychology (AWP) Conference- <i>Volunteer</i>	2012
MLK Celebration Week Planning Committee- <i>Graduate student representative</i>	2010-2012
Southern Lehigh Reading Program- <i>Volunteer Tutor</i>	2011
Lehigh University Greek Leadership Convention- <i>Conversation guide</i>	2010
Lehigh Prison Project - <i>Volunteer tutor</i>	2009-2010
Graduate Student Senate (GSS) - <i>Counseling Psychology Representative</i>	2009-2010
Bill and Melinda Gates Millennium Scholars Leadership Conference- <i>Workshop facilitator</i>	2009
District of Columbia Psychological Association conference- <i>Volunteer</i>	2008
Hip Hop Mental Health Project- <i>Community dialogue facilitator</i>	2008

## PROFESSIONAL AFFILIATIONS

Association for Women in Psychology (AWP) student member	2012-Present
American Psychological Association (APA) student affiliate	2009-Present
American Psychological Association (APA) Division of Psychotherapy student member	2013-Present
ACA student member	2008-2009